

# **8<sup>th</sup> Baltic Sea Science Congress**

**22 – 26, August 2011**

**St. Petersburg, Russia**

## **P R O G R A M M E**

*St. Petersburg*  
*2011*

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## **Background**

The Baltic Sea Science Congress (BSSC) is an international forum for researchers of the Baltic Sea countries and is uniting the three major scientific communities: the Conference of Baltic Oceanographers (CBO), Baltic Marine Biologists (BMB), and Baltic Sea Geologists (BSG). The objective of the congress is to bring together marine scientists and experts as well as young researchers.

With 7 BSSCs already held, the tradition is to alternate the biannual events among the Baltic Sea countries. As it was agreed at the last BSSC in Tallinn, the 8th Congress is held in the city of St.Petersburg, Russia and organized by Russian State Hydrometeorological University (RSHU) ([www.rshu.ru](http://www.rshu.ru)) in cooperation with BONUS Programme and Russian research institutions and scientific societies, with large contribution of CBO, BMB and BSG. The headline of the 8th BSSC is “Joint research efforts for sustainable ecosystem management”.

The Congress is mainly supported by the Government of St. Petersburg, the Russian Foundation for Basic Research, TransCredit-Bank, RSHU and BONUS Programme.

## **International Scientific Steering Committee**

**Vladimir Ryabchenko** — Chair, Chair of CBO, P.P.Shirshov Institute of Oceanology, Russian Academy of Sciences (RAS)

Andris Andrušaitis	Urmas Lips	Vadim Sivkov
Hans Burchard	Georg Martin	Sergey Skarlato
Emelyan Emelyanov	Stanislaw Massel	Pauli Snoeijs
Juri Elken	Markus Meier	Tarmo Soomere
Wolfgang Fennel	Kai Myrberg	Mikhail Spiridonov
Bo Gustafsson	Anders Omstedt	Henry Vallius
Sergey Golubkov	Jan Piechura	Martin Wahl
Jan Harff	Teresa Radziejewska	
Jorn Bo Jensen	Alexander Rybalko	

Nicolai Kliem            Bernd Schneider  
Aarno Kotilainen        Hendrik Schubert  
Andreas Lehman         Mikhail Shilin

### **Local Organizing Committee**

**Lev Karlin**, Congress Co-Chair, Russian State Hydrometeorological University (RSHU), Rector

**Robert Nigmatullin**, academician of RAS, P.P.Shirshov Institute of Oceanology, RAS, Director

**Alexander Alimov**, academician of RAS, President of the Russian Hydrobiological Society

**Oleg Petrov**, A.P.Karpinsky Russian Geological Research Institute, Director General

**Vladimir Georgievsky**, State Hydrological Institute, Director

**Anatoly Grabovsky**, North-West Administration for Hydrometeorology and Environmental Monitoring, Head

**Dmitry Golubev**, Committee for Nature Use, Environmental Protection and Ecological Safety, St.Petersburg Administration, Head

**Irena Telesh**, Congress Co-Chair, Secretary General of the Russian Hydrobiological Society, Zoological Institute, RAS

**Daria Ryabchuk**, Congress Co-Chair, Chair of BMG, A.P.Karpinsky Russian Geological Research Institute (VSEGEI)

### **Congress contact / Scientific Secretary**

*Scientific Secretary:* **Tatjana Eremina**, Russian State Hydrometeorological University

*Technical Secretary:* **Alexandra Ershova**, Russian State Hydrometeorological University

## BSSC 2011 Timetable

### *Monday, August 22*

11 <sup>00</sup> - 13 <sup>00</sup>	Registration	Hotel lobby
13 <sup>00</sup> - 13 <sup>20</sup>	<b>Opening ceremony</b>	Blue 4+5
13 <sup>20</sup> - 15 <sup>20</sup>	<b>Plenary session 1</b>	Blue 4+5
15 <sup>20</sup> - 15 <sup>50</sup>	Coffee break	Hotel lobby
15 <sup>50</sup> - 17 <sup>50</sup>	<b>Plenary session 2</b>	Blue 4+5
17 <sup>50</sup> - 19 <sup>00</sup>	<b>Poster session 1</b>	Hotel lobby
18 <sup>00</sup> - 20 <sup>00</sup>	BMB Committee meeting	Green 5
17 <sup>50</sup> - 20 <sup>00</sup>	BONUS project ECOSUPPORT meeting	Red 8
20 <sup>00</sup> -22 <sup>00</sup>	Ice-break meeting	Open-air buffet

### *Tuesday, August 23*

9 <sup>00</sup> - 10 <sup>40</sup>	<b>Plenary session 3</b>	Blue 4+5
10 <sup>40</sup> - 11 <sup>00</sup>	Coffee break	Hotel lobby
11 <sup>00</sup> - 13 <sup>00</sup>	<b>1.</b> Late Quaternary geological development of the Baltic Sea: paleoreconstructions - links to the modern climate change <b>1/1.</b> An interdisciplinary view on Baltic Sea level change– from a global to a regional perspective, from multiyear to decadal scales	Blue 3
11 <sup>00</sup> - 13 <sup>00</sup>	<b>2.</b> Transport and mixing in the Baltic Sea and other stratified basins	Blue 4+5
11 <sup>00</sup> - 13 <sup>00</sup>	<b>4.</b> Interplay of physical, biological and geological processes in various spatial and temporal scales	Red 11
13 <sup>00</sup> - 14 <sup>30</sup>	Lunch	Hotel restaurant
14 <sup>30</sup> - 17 <sup>00</sup>	<b>1/1.</b> An interdisciplinary view on Baltic Sea level change– from a global to a regional perspective, from multiyear to decadal scales <b>1/2.</b> Geology and Archaeology: Submerged	Blue 3

	Holocene Baltic landscapes	
14 <sup>30</sup> - 17 <sup>00</sup>	<b>2.</b> Transport and mixing in the Baltic Sea and other stratified basins	Green 9
14 <sup>30</sup> - 17 <sup>15</sup>	<b>4.</b> Interplay of physical, biological and geological processes in various spatial and temporal scales	Red 11
17 <sup>00</sup> - 17 <sup>30</sup>	Coffee break	Hotel lobby
17 <sup>30</sup> - 19 <sup>00</sup>	<b>Poster session 2</b>	Hotel lobby
17 <sup>15</sup> - 18 <sup>15</sup>	“GoF Year 2014, bio - and geodiversity” meeting	Green 7
19 <sup>00</sup> -19 <sup>30</sup>	CBO meeting	Green 5
19 <sup>30</sup> -20 <sup>30</sup>	“GoF Year 2014, ecosystem health” meeting	Green 7
19 <sup>00</sup> -20 <sup>00</sup>	BSG meeting on the Geological Atlas of the Baltic Sea	Green 6
20 <sup>00</sup> -23 <sup>00</sup>	BONUS + Young Scientists’ Club	RSHU(bus transfer)
20 <sup>00</sup> -22 <sup>00</sup>	BMB meeting on writing The Book on the Baltic Sea	Green 5

### ***Wednesday, August 24***

9 <sup>00</sup> - 10 <sup>40</sup>	<b>Plenary session 4</b>	Blue 4+5
10 <sup>40</sup> - 11 <sup>00</sup>	Coffee break	Hotel lobby
11 <sup>00</sup> - 12 <sup>30</sup>	<b>4.</b> Interplay of physical, biological and geological processes in various spatial and temporal scales	Green 9
12 <sup>30</sup> - 13 <sup>00</sup>	<b>3. Coastal-offshore exchange processes</b>	Green 9
11 <sup>00</sup> - 13 <sup>00</sup>	<b>5.</b> Mechanisms behind biological variability in the Baltic Sea environment <b>5/1.</b> Plankton diversity, functioning and dynamics in the changing Baltic Sea ecosystem	Blue 3
11 <sup>00</sup> - 13 <sup>15</sup>	<b>4/1</b> Production, transport, and emission of trace gases	Blue 4+5
13 <sup>00</sup> - 14 <sup>30</sup>	Lunch	Restaurant
14 <sup>30</sup> - 17 <sup>00</sup>	<b>3. Coastal-offshore exchange processes</b>	Green 9

14 <sup>30</sup> - 17 <sup>00</sup>	<b>5/1.</b> Plankton diversity, functioning and dynamics in the changing Baltic Sea ecosystem	Blue 3
14 <sup>30</sup> - 17 <sup>00</sup>	<b>6.</b> Impact of changing climate and human-induced pressures on the Baltic Sea ecosystem	Red 11
18 <sup>00</sup> -21 <sup>00</sup>	Excursion:1)City sightseeing tour 2) Visit to R/V “Elisabeth Mann Borgese” of the Baltic Sea Research Institute, Warnemünde	

***Thursday, August 25***

9 <sup>00</sup> - 10 <sup>40</sup>	<b>Plenary session 5</b>	Blue 4+5
10 <sup>40</sup> - 11 <sup>00</sup>	Coffee break	Hotel lobby
11 <sup>00</sup> - 12 <sup>00</sup>	<b>6.</b> Impact of changing climate and human-induced pressures on the Baltic Sea ecosystem	Blue 4+5
12 <sup>00</sup> - 13 <sup>15</sup>	<b>8.</b> Operational forecasting in the Baltic Sea - from storm surge warnings to ecological status information	Blue 4+5
11 <sup>00</sup> - 12 <sup>00</sup>	<b>3. Coastal-offshore exchange processes</b>	Blue 3
12 <sup>00</sup> - 13 <sup>00</sup>	<b>6/1.</b> Environmental geology and geological hazards of the Baltic Sea bottom and its coastal zones	Blue 3
11 <sup>00</sup> - 13 <sup>00</sup>	<b>5/1.</b> Plankton diversity, functioning and dynamics in the changing Baltic Sea ecosystem <b>5/2.</b> Biodiversity, productivity and the indicative role of bottom communities	Red 11
13 <sup>00</sup> - 14 <sup>30</sup>	Lunch	Restaurant
14 <sup>30</sup> - 16 <sup>00</sup>	<b>6/1.</b> Environmental geology and geological hazards of the Baltic Sea bottom and its coastal zones	Green 9
16 <sup>00</sup> - 17 <sup>00</sup>	<b>9.</b> Modeling as support for management	Green 9
14 <sup>30</sup> - 17 <sup>00</sup>	<b>8.</b> Operational forecasting in the Baltic Sea - from storm surge warnings to ecological status information	Blue 3

	<b>8/1.</b> Satellite remote sensing of hydrometeorological and ecological processes in the Baltic Sea: methods and applications	
14 <sup>30</sup> - 16 <sup>15</sup>	<b>5/2.</b> Biodiversity, productivity and the indicative role of bottom communities	Red 11
16 <sup>15</sup> - 17 <sup>00</sup>	<b>7.</b> The carbon/CO <sub>2</sub> cycle and the acid-base (pH) balance in semi-enclosed and shelf seas: Present state and anthropogenic impacts	Red 11
14 <sup>30</sup> - 17 <sup>00</sup>	ABNORMAL workshop	Red 7
17 <sup>00</sup> - 18 <sup>30</sup>	<b>Poster session 3</b>	Hotel lobby
20 <sup>00</sup> -23 <sup>00</sup>	Congress dinner	Cruise boat

***Friday, August 26***

9 <sup>00</sup> - 10 <sup>40</sup>	<b>Plenary session 6</b>	Blue 4+5
10 <sup>40</sup> - 11 <sup>00</sup>	Coffee break	Hotel lobby
11 <sup>00</sup> - 13 <sup>15</sup>	<b>9.</b> Modeling as support for management	Blue 4+5
11 <sup>00</sup> - 12 <sup>15</sup>	<b>7.</b> The carbon/CO <sub>2</sub> cycle and the acid-base (pH) balance in semi-enclosed and shelf seas: Present state and anthropogenic impacts	Blue 3
12 <sup>15</sup> - 13 <sup>00</sup>	<b>9/1.</b> Assessing the status and the trends of the Baltic Sea ecosystem	Blue 3
11 <sup>00</sup> - 13 <sup>00</sup>	<b>10.</b> Managing the scientific knowledge on the Baltic Sea environment	Red 11
13 <sup>00</sup> - 14 <sup>30</sup>	Lunch	Restaurant
14 <sup>30</sup> - 15 <sup>45</sup>	<b>9.</b> Modeling as support for management	Blue 4+5
14 <sup>30</sup> - 15 <sup>45</sup>	<b>9/1.</b> Assessing the status and the trends of the Baltic Sea ecosystem	Blue 3
14 <sup>30</sup> - 15 <sup>45</sup>	<b>10.</b> Managing the scientific knowledge on the Baltic Sea environment	Red 11
15 <sup>45</sup> - 16 <sup>15</sup>	Coffee break	Hotel lobby
16 <sup>15</sup> - 17 <sup>00</sup>	<b>Closing ceremony</b>	Blue 4+5

*Notes. Closing ceremony includes:*

*1) short reports of conveners with rewarding of best posters of young scientists,*

*2) announcement of the BSSC-9 venue.*

*Poster session 1: presentation of posters from sessions 1, 1/1, 1/2, 2, 3, 4.*

*Poster session 2: presentation of posters from sessions 5, 5/1, 5/2, 6, 6/1.*

*Poster session 3: presentation of posters from sessions 4/1, 7, 8, 8/1, 9, 9/1, 10.*

## ***Saturday, August 27***

**10<sup>00</sup>-17<sup>00</sup> Excursions**

## Connected meetings and workshops

<i>Type of meeting</i>	<i>Date, time</i>	<i>Room</i>
<b>BMB Committee meeting</b>	August 22, 18 <sup>00</sup> -20 <sup>00</sup>	Green 5
<b>BONUS project ECOSUPPORT meeting</b>	August 22, 17 <sup>50</sup> - 20 <sup>00</sup>	Red 8
<b>“The Gulf of Finland Year 2014, bio- and geodiversity” Organizing Committee meeting</b>	August 23, 17 <sup>15</sup> - 18 <sup>15</sup>	Green 7
<b>“The Gulf of Finland Year 2014, ecosystem health” Organizing Committee meeting</b>	August 23, 19 <sup>30</sup> - 20 <sup>30</sup>	Green 7
<b>CBO meeting</b>	August 23, 19 <sup>00</sup> - 19 <sup>30</sup>	Green 5
<b>BMB meeting on writing The Book on the Baltic Sea</b>	August 23, 20 <sup>00</sup> - 22 <sup>00</sup>	Green 5
<b>BSG meeting on the Geological Atlas of the Baltic Sea</b>	August 23, 19 <sup>00</sup> - 20 <sup>00</sup>	Green 6
<b>BONUS + Young Scientists’ Club</b>	August 23, 20 <sup>00</sup> - 23 <sup>00</sup>	RSHU
<b>The Nordic Council of Ministers’ project ABNORMAL workshop</b>	August 25, 14 <sup>30</sup> - 17 <sup>00</sup>	Red 7

**BONUS + Young Scientists’ Club** will be held in Russian State Hydrometeorological University. Bus transfer will be organized from and to the hotel for participants.

## **Practical information**

The 8<sup>th</sup> Baltic Sea Science Congress will be held in the hotel **Park Inn Pribaltiyskaya**.

This St. Petersburg lodging is the largest conference hotel in the city. It is located right on the coast of the Gulf of Finland, a 15-minute drive to the city centre. The hotel offers the guests newly renovated rooms, state-of-the-art conference centre, as well as direct access to aqua park, and free shuttle to the city centre.

### **Hotel address:**

14 Korablestroiteley Street

St. Petersburg 199226 Russia

<http://www.parkinn.com/hotelpribaltiyskaya-stpetersburg>

Registration will start at 11.00 on Monday, 22 August, in the Hotel lobby, two hours prior to the Opening ceremony. Participants are required to register and collect their badges and Congress materials. The name badge will be a personal ‘pass’ to all the Congress events, including coffee-breaks, lunches, Reception on the first day, excursions, etc.

The Organizing Committee and Congress staff will wear badges of different colors, so that it is easy to distinguish them.

## **Presenters guidelines**

The Congress will start with invited speakers’ lectures (40 min each). Plenary lectures should be no longer than 20 min, and oral presentations – 15 min. Discussions should fit into allocated time as well. All presentations are to be prepared in PowerPoint or Adobe Acrobat format. All presenters are asked to leave their presentations in the computers available in the lecture halls at least in the morning of the day of their scheduled presentations.

Poster presentations are divided in 3 sessions and will be displayed in the Hotel lobby on Monday, Tuesday and Thursday. The participants must mount their posters 1 hour prior the poster sessions and dismount them immediately after the session. The recommended poster size is A0, orientation – portrait.

## Social and cultural programme

<u>Day</u>	<u>Event</u>	<u>Location</u>	<u>Comments</u>
<b>Monday,</b> August 22 20 <sup>00</sup> -22 <sup>00</sup>	Ice-break meeting – Open-air buffet	Pribaltiyskaya square	Square in front of the Park Inn Pribaltiyskaya hotel, facing the Gulf of Finland.
<b>Wednesday,</b> August 24 8 <sup>00</sup> -21 <sup>00</sup>	1) City sightseeing tour  2) Visit to R/V “Elisabeth Mann Borgese”	Start from the Park Inn Pribaltiyskaya hotel “Morskoy Vokzal” passenger ship terminal	The famous City Tour double-decker buses will take you to a 2-hour excursion around the city. The Research vessel of the Leibniz Institute for Baltic Sea Research Warnemünde. Transfer from the hotel to the terminal will be organized.
<b>Thursday,</b> August 25 20 <sup>00</sup> -23 <sup>00</sup>	Congress dinner	Cruise boat	3-hour cruise along the Neva river and its tribu - taries in the center of St.Petersburg
<b>Saturday,</b> August 27 10 <sup>00</sup> -17 <sup>00</sup>	Excursions to: Hermitage- Peterhof- Tsarskoe Selo	To be booked on the day of arrival.	<u>Organized bus day tours</u> <u>to:</u> - <i>State Hermitage Museum</i> – one of the greatest col- lection of European art in Europe, and Winter Pala- ce – the Russian Tzars’ Residence.

- *Peterhof* - the palace-ensemble in a suburb of St. Petersburg, laid out on the orders of Peter the Great, including gardens and famous fountain complex, sometimes referred as the “Russian Versailles”.

- *Tsarskoe Selo* -a former Russian residence of the imperial family in the town of Pushkin, including regular gardens and Catherine palace with the recreated famous Amber room.

## BSSC 2011 Programme

### *MONDAY, August 22*

#### **13<sup>00</sup>-13<sup>20</sup> Blue 4+5 Opening ceremony**

Lev Karlin – Rector of RSHU

Andrey Maximov – Head of Committee for Science and High School of St.Petersburg Administration

Kaisa Kononen – Director of BONUS programme

Iouri Oliouline – IOC/UNESCO

Vladimir Zhmur – Head of the Department of competitive projects on Earth sciences, human and social sciences, Russian Foundation for Basic Research

#### **13<sup>20</sup>-15<sup>20</sup> Blue 4+5 Plenary session 1.**

**Convener: Andris Andrušaitis**

13<sup>20</sup>-14<sup>00</sup> IL1. Knowledge generation vs. decision processes - the issue of regional climate service

Hans von Storch

14<sup>00</sup>-14<sup>40</sup> IL2. Bioavailability of dissolved organic nitrogen and its contribution to eutrophication in aquatic systems

Deborah Bronk

14<sup>40</sup>-15<sup>20</sup> IL3. Some aspects of biogeochemistry of oxygen-deficient marine systems

Wajih Naqvi

#### **15<sup>20</sup>-15<sup>50</sup> Hotel lobby**

**Coffee break**

#### **15<sup>50</sup>-17<sup>50</sup> Blue 4+5 Plenary session 2.**

**Convener: Tarmo Soomere**

15<sup>50</sup>-16<sup>30</sup> IL4. The numerical modeling of wind/waves/currents dynamic system

Dmitry Chalikov

16<sup>30</sup>-17<sup>10</sup> IL5. The Baltic Sea is not poor but rich in species: new biodiversity pattern dis-

covered

Irena V. Telesh, Hendrik Schubert,  
Sergei O. Skarlato

17<sup>10</sup>-17<sup>50</sup> IL6. Geological Structure of the  
Baltic Region and Adjacent Areas, and its  
Imprint on Plio-Pleistocene - Holocene De -  
velopment

Alexey Amantov, Willy Fjeldskaar

**17<sup>50</sup>-19<sup>00</sup> Hotel  
lobby**

**Poster session 1**

**18<sup>00</sup>-20<sup>00</sup> Green 5**

BMB Committee meeting

**17<sup>50</sup>-20<sup>00</sup> Red 8**

BONUS project ECOSUPPORT meeting

**20<sup>00</sup>-22<sup>00</sup> Open-air  
buffet**

Ice-break meeting

**TUESDAY, August 23**

**9<sup>00</sup>-10<sup>40</sup> Blue 4+5 Plenary session 3. Convener: Kai Myrberg**

9<sup>00</sup>-9<sup>20</sup> L1. Changes in species composition of planktonic diatom assemblages along the Baltic Sea transect and its significance for palaeosalinity inferences

Andrzej Witkowski, Slawomir Dobosz, Thomas Neumann, Richard Telford

9<sup>20</sup>-9<sup>40</sup> L2. Stone age human occupations and post-glacial development of the Baltic Sea in Narva-Luga Klint Bay area

Alar Rosentau, Dmitry Subetto, Raivo Aunap, Merle Muru, Nikolaj Letjuka, Aivar Kriiska, Sergej Lisitsyn, Dmitry Gerasimov, Kerkko Nordqvist, Vladimir Dronov

9<sup>40</sup>-10<sup>00</sup> L3. The Baltic Sea Tracer Releaser Experiment: Mixing processes and mixing rates

Peter Holtermann, Lars Umlauf, Gregor Rehder, Toste Tanhua, Joanna Waniek

10<sup>00</sup>-10<sup>20</sup> L4. The response of the Baltic Sea to climate variability

Klaus Getzlaff, Andreas Lehmann, Hans-Harald Hinrichsen

10<sup>20</sup>-10<sup>40</sup> L5. Towards the use of currents for environmental management of vulnerable sea areas

Tarmo Soomere

**10<sup>40</sup>- 11<sup>00</sup> Hotel lobby**

**Coffee break**

**11<sup>00</sup>- 12<sup>45</sup> Blue 3**

**1. Late Quaternary geological development of the Baltic Sea: paleoreconstructions - links to the modern climate change**  
**Conveners: Aarno Kotilainen, Mikhail Spiridonov, Andrzej Witkowski**

11<sup>00</sup>-11<sup>15</sup> O1. The Early Atlantic ingression in the light of a proxy investigation of the

sediment cores from Pomeranian Bay and Arkona Basin (southern Baltic Sea)

Robert Kostecki, Beata Janczak-Kostecka  
11<sup>15</sup>-11<sup>30</sup> O2. Past and future changes of saline inflow into the Baltic Sea simulated with a Regional Climate Model

Semjon Schimanke, Markus Meier  
11<sup>30</sup>-11<sup>45</sup> O3. The first results of the INFLOW project in the Eastern Gulf of Finland - new data on paleogeography and geological development during the last 8500 years

Daria Ryabchuk, Vladimir Zhamoida, Andrey Grigoriev, Mikhail Spiridonov, Aarno Kotilainen, Joonas Virtasalo, Henry Vallius, Matthias Moros, Evgenia Dorokhova, Vadim Sivkov

11<sup>45</sup>-12<sup>00</sup> O4. Late Holocene salinity evolution of Baltic Sea surface and deep water masses based on Sr-87/Sr-86 ratios of subfossil mollusk shells

Laura Arppe, Juha A. Karhu  
12<sup>00</sup>-12<sup>15</sup> O5. Late holocene development of the Vistula mouth in Gdańsk area

Wojciech Jegliński, Szymon Uściniowicz  
12<sup>15</sup>-12<sup>30</sup> O6. Vegetation and climate changes at the boundary of the Lateglacial- Holocene in the Baltic Sea Basin area and adjacent regions of the West Europe

Irina I. Borzenkova, D.D.Kuznetsov, T.V.Sapelko, D.A.Subetto  
12<sup>30</sup>-12<sup>45</sup> O7. Holocene morphogenesis of the Darss-Zingst peninsula: simulation of multi-scale processes and their interactions in the southern Baltic Sea

Wenyan Zhang, Jan Harff, Ralf Schneider  
**1/1. An interdisciplinary view on Baltic Sea level change– from a global to a regional**

12<sup>45</sup>-13<sup>00</sup> Blue 3

**perspective, from multiyear to decadal scales**

**Conveners: Birgit Hünicke, Eduardo Zorita, Anders Omstedt**

12<sup>45</sup>-13<sup>00</sup> O8. Storm surges in the Western Baltic Sea: the present and a possible future  
Ulf Graewe, Hans Burchard

**11<sup>00</sup>-13<sup>00</sup> Blue 4+5 2. Transport and mixing in the Baltic Sea and other stratified basins**

**Conveners: Hans Burchard, Lars Umlauf, Juri Elken**

11<sup>00</sup>-11<sup>15</sup> O19. Freshwater fluxes in the Baltic Sea: A model study

Robinson Hordoir, Markus Meier

11<sup>15</sup>-11<sup>30</sup> O20. The feature of thermohaline regime and water exchange in the Baltic Sea in summer 2010 (observation and modeling)

Sergey Shchuka, Vladimir Zhmur, Anton Dvornikov, Mikhail Dobrovolskiy, Kirill Lyubshov

11<sup>30</sup>-11<sup>45</sup> O21. Inflow waters inside the Baltic Sea, observation and modeling

Jan Piechura, Robert Osiński

11<sup>45</sup>-12<sup>00</sup> O22. Internal-wave mixing in the Baltic Sea: The role of near-inertial and high-frequency waves

Lars Umlauf, Eefke van der Lee

12<sup>00</sup>-12<sup>15</sup> O23. Structure of unsteady salty water overflow in the Slupsk Furrow of the Baltic Sea

Victor Zhurbas, Jüri Elken, Vadim Paka, Jan Piehura, Irina Chubarenko, Germo Vali, Nikolay Golenko, Sergey Shchuka

12<sup>15</sup>-12<sup>30</sup> O24. Lead transport through water stratification areas in the Southern Baltic

Jacek Beldowski, Karol Kuliński, Stanisław Massel

11<sup>00</sup>-13<sup>00</sup> Red 11

12<sup>30</sup>-12<sup>45</sup> O25. Increased frequency of winter-time stratification collapse in the Gulf of Finland since 1990s

Jüri Elken, Urmas Raudsepp,  
Jaan Laanemets, Jelena Passenko,  
Ilja Maljutenko

12<sup>45</sup>-13<sup>00</sup> O26. Compressibility of sea surface created by 3D current field

Andrea Giudici, Jaan Kalda

**4. Interplay of physical, biological and geological processes in various spatial and temporal scales.**

*Transport processes and their applications*

**Conveners: Tarmo Soomere,**

**Ira Didenkulova, Kristofer Döös,**

**Jan Piechura, Emelyan Emelyanov**

11<sup>00</sup>-11<sup>15</sup> O53. Transport of fresh and resuspended particulate organic material in the Baltic Sea—a model study

Elin Almroth-Rosell, Kari Eilola,

Robinson Hordoir, Markus Meier, Per Hall

11<sup>15</sup>-11<sup>30</sup> O54. Modelling transport and dispersion in the Baltic Sea

Joakim Kjellsson, Kristofer Döös

11<sup>30</sup>-11<sup>45</sup> O55. Larval traits determine dispersal distance and optimum size of marine protected areas

Hanna Corell, Per Moksnes, Anders Engqvist,  
Kristofer Döös, Per Jonsson

11<sup>45</sup>-12<sup>00</sup> O56. How to make oil stay at sea

Anders Höglund, H.E. Markus Meier

12<sup>00</sup>-12<sup>15</sup> O57. Optimizing fairways to reduce environmental risks in the Baltic Sea

Bert Viikmäe, Tarmo Soomere,

Nicole Delpeche-Ellmann

12<sup>15</sup>-12<sup>30</sup> O58. Operational oil drift and fate model applications for environmental protec-

tion: BalticWay, a step forward to safer sea - ways

Jens Murawski

12<sup>30</sup>-12<sup>45</sup> O59. Source attribution of nutrients in the Baltic Sea ecosystem

Hagen Radtke

12<sup>45</sup>-13<sup>00</sup> O60. Patterns of sediment transport along the Latvian and Estonian coasts along the Baltic Proper and the Gulf of Riga

Maija Viška, Tarmo Soomere, Katri Kartau, Andrus Räämet

13<sup>00</sup>- 14<sup>30</sup> **Hotel restaurant**

**Lunch**

14<sup>30</sup>- 15<sup>00</sup> **Blue 3**

**1/1. An interdisciplinary view on Baltic Sea level change– from a global to a regional perspective, from multiyear to decadal scales.**

**Conveners: Birgit Hünicke, Eduardo Zorita, Anders Omstedt**

14<sup>30</sup>-14<sup>45</sup> O9. Sea level scenarios and extreme events on the Finnish coast

Milla Johansson, Kimmo Kahma, Hilikka Pellikka

14<sup>45</sup>-15<sup>00</sup> O10. Recent changes in climate and level of the Gulf of Finland

Valery Malinin, Svetlana Gordeyeva, Yulia Mitina

15<sup>00</sup>-17<sup>00</sup> **Blue 3**

**1/2. Geology and Archaeology: Submerged Holocene Baltic landscapes.**

**Conveners:Jan Harff, Alar Rosentau, Friedrich Lüth**

15<sup>00</sup>-15<sup>15</sup> O11. The new data about Neva River formation

Marianna Kulkova, Evgeny Nesterov, Tatiana Gusentsova, Petr Sorokin

15<sup>15</sup>-15<sup>30</sup> O12. Coastal processes at the Baltic Sea cliff near the Sarnate Neolithic complex

Purgalis Ingus, Lapinskis Janis,  
Berzins Valdis, Kalnina Laimdota  
15<sup>30</sup>-15<sup>45</sup> O13. Mid-Holocene shoreline displacement in the south-eastern part of the Gulf of Finland through the prism of archaeological data

Dmitry Gerasimov, Aivar Kriiska,  
Sergey Lisitsyn  
15<sup>45</sup>-16<sup>00</sup> O14. Acoustic indicators of a possible Baltic Ice Lake drainage debris facies in the northern Baltic Sea

Outi Hyttinen, Aarno Kotilainen,  
Veli-Pekka Salonen  
16<sup>00</sup>-16<sup>15</sup> O15. Submarine moraines in the Kvarken Archipelago, Baltic Sea

Anu Marii Kaskela, Aarno Kotilainen  
16<sup>15</sup>-16<sup>30</sup> O16. Ground-penetrating radar study of the Kudrukula archaeological site

Alina Tshugai, Juri Plado, Argo Joeleht,  
Aivar Kriiska  
16<sup>30</sup>-16<sup>45</sup> O17. Problems of marine archaeology of Prussians land

Vladimir Kulakov  
16<sup>45</sup>-17<sup>00</sup> O18. Interdisciplinary studies in geology and archaeology - a Baltic marine approach

14<sup>30</sup>-17<sup>00</sup> Green 9 **2. Transport and mixing in the Baltic Sea and other stratified basins.**

**Conveners: Hans Burchard, Lars Umlauf, Juri Elken**

14<sup>30</sup>-14<sup>45</sup> O27. Convective exchange flows above sloping bottom: theoretical considerations and application to the Baltic Sea conditions

Irina Chubarenko  
14<sup>45</sup>-15<sup>00</sup> O28. Current, wave and turbulent

viscosity structures in the South-East  
Baltic

Mariya Golenko, Nikolay Golenko  
15<sup>00</sup>-15<sup>15</sup> O29. Dispersion properties of  
surface currents in the Gulf of Finland

Mikk Viidebaum, Jaan Kalda,  
Tarmo Soomere

15<sup>15</sup>-15<sup>30</sup> O30. The performance of the para -  
meterizations of vertical turbulence in the  
modeling of hydrodynamics in the Baltic Sea

Laura Tuomi, Kai Myrberg

15<sup>30</sup>-15<sup>45</sup> O31. Diapycnal transport and mix -  
ing efficiency in stratified oscillating boun -  
dary layers near sloping topography

Lars Umlauf, Hans Burchard

15<sup>45</sup>-16<sup>00</sup> O32. Tidally induced internal waves  
and mixing inside the Drobak Sill in the  
Oslofjord

André Staalstrøm, Eyvind Aas,  
Bengt Liljebladh

16<sup>00</sup>-16<sup>15</sup> O33. The impact of shear-induced  
bottom boundary-layer stratification on  
diapycnal mixing in a stratified basin

Johannes Becherer, Lars Umlauf

16<sup>15</sup>-16<sup>30</sup> O34. Variability of horizontal  
gradients of air and water surface temperature  
in the vernal frontal zone period of Lake  
Ladoga

Mikhail Naumenko, Vadim Guzivaty,  
Sergey Karetnikov

16<sup>30</sup>-16<sup>45</sup> O35. Numerical study of the inflow  
event in the Baltic transition zone

Xi Lu, Emil Stanev

16<sup>45</sup>-17<sup>00</sup> O36. Research and development of  
new instrumentation for studying mixing in  
the Baltic Sea

Vadim Paka, Vladimir Baranov,

14<sup>30</sup>-17<sup>15</sup> Red 11

Alexei Bolebrukh, Alexei Kondrashov,  
Andrei Korzh, Alexander Ostrovski,  
Alexander Podufalov, Dmitri Shvoev,  
Andrei Zatsepin, Victor Zhurbas

**4. Interplay of physical, biological and geological processes in various spatial and temporal scales.**

*Limology, wave patterns, wave-coastal interaction, impact on biota*

**Conveners: Tarmo Soomere,**

**Ira Didenkulova, Kristofer Döös,**

**Jan Piechura, Emelyan Emelyanov**

14<sup>30</sup>-14<sup>45</sup> O61. The main barrier zones in the Baltic Sea (Limology)

Emelyan M. Emelyanov

14<sup>45</sup>-15<sup>00</sup> O62. Features of the water column redox interface biogeochemical structures in the Baltic Deeps and the Black Sea

Svetlana Pakhomova, Evgeny Yakushev

15<sup>00</sup>-15<sup>15</sup> O63. Seismic features diagnostic of contourite drifts in the Baltic Sea

Eugenia Dorokhova, Vadim Sivkov

15<sup>15</sup>-15<sup>30</sup> O64. Change of the beach profile under the joint effect of ship and wind waves

Ira Didenkulova, Maija Viška,

Dmitry Kurennoy

15<sup>30</sup>-15<sup>45</sup> O65. Decadal changes in significant wave height in the Baltic Sea

Andrus Räämet, Tarmo Soomere

15<sup>45</sup>-16<sup>00</sup> O66. Multi-decadal variability of sea-ice conditions in the Baltic Sea

Jari Haapala, Robinson Hordoir,

Markus Meier, Byoung Woong An

16<sup>00</sup>-16<sup>15</sup> O67. Freak waves in the coastal zone of the Baltic Sea

Ira Didenkulova

16<sup>15</sup>-16<sup>30</sup> O68. Decadal variations of wave-driven sediment transport processes in the Gulf of Riga

Katri Kartau, Maija Viška, Tarmo Soomere

16<sup>30</sup>-16<sup>45</sup> O69. Factors controlling DOC in the Baltic seawater as derived from measurements and segment regression modeling

Anna Maciejewska, Beata Szymczycha, Karol Kulinski, Janusz Pempkowiak

16<sup>45</sup>-17<sup>00</sup> O70. Groundwater seepage impact on biota

Lech Kotwicki, B. Szymczycha, S. Vogler, K. Grzelak, M. Czub, O. Dellwig, T. Gentz

17<sup>00</sup>-17<sup>15</sup> O71. Physical properties of water-sediments layer

Gennady Ivanov, Alexey Svertilov, Mikhail Kholmyansky

17<sup>00</sup>-17<sup>30</sup> **Hotel lobby**

**Coffee break**

17<sup>30</sup>-19<sup>00</sup> **Hotel lobby**

**Poster session 2**

17<sup>15</sup>-18<sup>15</sup> Green 7

“GoF Year 2014, bio- and geodiversity” meeting

19<sup>00</sup>-19<sup>30</sup> Green 5

CBO meeting

19<sup>30</sup>-20<sup>30</sup> Green 7

“GoF Year 2014, ecosystem health” meeting

19<sup>00</sup>-20<sup>00</sup> Green 6

BSG meeting on the Geological Atlas of the Baltic Sea

20<sup>00</sup>-23<sup>00</sup> RSHU

BONUS + Young Scientists’ Club

(bus transfer)

20<sup>00</sup>-22<sup>00</sup> Green 5

BMB meeting on writing The Book on the Baltic Sea

**WEDNESDAY, August 24**

**9<sup>00</sup>-10<sup>40</sup> Blue 4+5 Plenary session 4. Convener: Irena Telesh**

9<sup>00</sup>-9<sup>20</sup> L6. Lagrangian dispersion observed with surface drifters in the Baltic Sea

Kristofer Döös, Joakim Kjellsson

9<sup>20</sup>-9<sup>40</sup> L7. Spatial connectivity and predator spillover affect food-web structure in ecological sinks: the Baltic Sea case

Michele Casini, Thorsten Blenckner, Christian Möllmann, Anna Gírdmark, Martin Lindegren, Marcos Llope, Maris Plikshs, Georgs Kornilovs, Nils-Christian Stenseth

9<sup>40</sup>-10<sup>00</sup> L8. Why the Baltic salmon is so pale

Pauline Snoeijs, Xiang-Ping Nie, Jenny Zie, Norbert Hübner, Bo Tallmark, Clair Holeton

10<sup>00</sup>-10<sup>20</sup> L9. Environmental variables as explanations and predictors of spatial patterns of benthic organisms in the Baltic Sea: a literature review and a large-scale modelling approach

Martin Gullström, Martin Snickars, Göran Sundblad, Ulf Bergström, Anna-Leena Downie, Martynas Bucas, Karl Floren, Niklas Wijkmark, Johanna Mattila, Mats Lindegarth

10<sup>20</sup>-10<sup>40</sup> L10. Baltic Sea ecosystem changes and thresholds  
Thorsten Blenckner, Marcos Llope, Michele Casini, Christian Möllmann, Miguel Rodriguez-Medina, Christoph Humborg, Nils Christian Stenseth

**10<sup>40</sup>-11<sup>00</sup> Hotel lobby**

**Coffee break**

**11<sup>00</sup>-12<sup>30</sup> Green 9**

**4. Interplay of physical, biological and geological processes in various spatial and temporal scales.**

*Optics, freshwater and surface-specific effects*

**Conveners: Tarmo Soomere,  
Ira Didenkulova, Kristofer Döös,  
Jan Piechura, Emelyan Emelyanov**

11<sup>00</sup>-11<sup>15</sup> O72. Empirical quantification of the spatio-temporal dynamics of underwater light penetration in the Baltic Sea coast of SW Finland

Hanna Luhtala, Harri Tolvanen

11<sup>15</sup>-11<sup>30</sup> O73. Evaluation of solar radiation in the coastal area of the Baltic Proper

Kai Rosin

11<sup>30</sup>-11<sup>45</sup> O74. Results of simultaneous measurement of various optical characteristics in summer of 2010 in Central and South-Eastern Baltic

Vladimir Artemiev, Sergey Shchuka

11<sup>45</sup>-12<sup>00</sup> O75. The influence of increasing water turbidity on the sea surface temperature in the Baltic Sea: A model sensitivity study

Ulrike Löptien, Markus Meier

12<sup>00</sup>-12<sup>15</sup> O76. Observations of dynamical physical processes at the sea surface with acoustic methods

Agata Dragan, Barbara Swerpel,

Zygmunt Klusek

12<sup>15</sup>-12<sup>30</sup> O77. Natural surfactant sea surface films at the Baltic and Mediterranean: Comprehensive data on structure and seasonal evolution

Sanja Frka, Stanislaw Pogorzelski,

Zlatica Kozarac

12<sup>30</sup>-13<sup>00</sup> **Green 9 3. Coastal-offshore exchange processes.**

**Conveners: Kai Myrberg, Andreas**

**Lehmann, Vladimir Ryabchenko**

12<sup>30</sup>-12<sup>45</sup> O37. Multi-year simulation of chlorophyll and nutrient dynamics in the Gulf of Finland

11<sup>00</sup>-12<sup>15</sup> Blue 3

Urmas Raudsepp , Ilja Maljutenko, Gennadi Lessin, Jaan Laanemets, Jelena Passenko, Andres Jaanus

12<sup>45</sup>-13<sup>00</sup> O38. Factors influencing the low-frequency currents in shallow sea with complex topography: a case study in the Gulf of Finland

M.-J. Lilover, J. Pavelson, T. Kõuts

**5. Mechanisms behind biological variability in the Baltic Sea environment.**

**Conveners: Hendrik Schubert,**

**Pauli Snoeijs, Marina Orlova**

11<sup>00</sup>-11<sup>15</sup> O87. How do hydrodynamics and hydrography affect the survival of western Baltic cod early life stages?

Hans-Harald Hinrichsen, Karin Hüsey, Bastian Huwer

11<sup>15</sup>-11<sup>30</sup> O88. The noise behind the signal: A quantification of natural fluctuations in community composition needs to precede the detection of trends

Martin Wahl, Mark Lenz, Hans-Harald Hinrichsen, Andreas Lehmann

11<sup>30</sup>-11<sup>45</sup> O89. Spatial and temporal differences in Baltic *Fucus* forests and regulating factors

Ellen Schagerström, H. Forslund, S. Rĺberg, D. Johansson, R. Pereyra, K. Johanneson, L. Kautsky

11<sup>45</sup>-12<sup>00</sup> O90. Integrated sedimentological and ichnological analysis of Holocene varying saline influence on the Baltic Sea macrozoobenthic communities

Joonas Virtasalo, Aarno Kotilainen

12<sup>00</sup>-12<sup>15</sup> O91. Specific long-term variability of Baltic Sea zooplankton stocks due to environmental and anthropogenic influences – and

- potential consequences  
Lutz Postel, Carola Wagner
- 12<sup>15</sup>-13<sup>00</sup> Blue 3** **5/1. Plankton diversity, functioning and dynamics in the changing Baltic Sea ecosystem.**  
**Conveners: Inga Lips, Irena Telesh, Risto Lignell**  
 12<sup>15</sup>-12<sup>30</sup> O92. Linking organism properties and system behavior in the microbial food web: good agreement between model parameter estimates and their theoretical values  
Risto Lignell, Heikki Haario, Marko Laine, T. Frede Thingstad  
 12<sup>30</sup>-12<sup>45</sup> O93. Dynamics of bacterioplankton composition in the Gulf of Finland (metagenomic approach)  
Peeter Laas, Madis Metsis, Liisa Lilje, Jaak Simm  
 12<sup>45</sup>-13<sup>00</sup> O94. Influence of river inflow on the productivity and biodiversity in coastal area of the northern Baltic Sea  
Agneta Andersson
- 11<sup>00</sup>- 13<sup>00</sup> Blue 4+5** **4/1 Production, transport, and emission of trace gases.**  
**Conveners: Gregor Rehder, Bo Barker Jørgensen, Hermann Bange**  
 11<sup>00</sup>-11<sup>15</sup> O78. Shallow gas occurrences, methane fluxes and their controlling processes in the Baltic  
Gregor Rehder, Laura Lapham, Henrik Fossing, Wanda Gülzow, Jens Schneider von Deimling, Rudolf Endler, Volkhard Spiess, Jørn Bo Jensen, Volker Bruechert, Tim Ferdelmann, Oliver Schmale, Joonas Virtasalo, Dan Conley, Thomas Neumann, Thomas Leipe, Sabine Flury, Zsuzsanna Toth, Bo Barker Jørgensen, and the MSM 16/1

shipboard scientific party  
11<sup>15</sup>-11<sup>30</sup> O79. Controls on methane formation  
in Baltic Sea sediments  
Bo Barker Jørgensen, Timothy G. Ferdelman,  
Sabine Flury, Henrik Fossing, Lars  
Holmkvist, Laura Lapham  
11<sup>30</sup>-11<sup>45</sup> O80. Methane concentrations along  
a transect crossing an area with free methane  
gas (Bornholm Basin, Baltic Sea)  
Henrik Fossing, Timothy Ferdelman, Laura  
Lapham, Sabine Flury, Bo B. Jørgensen, Jørn  
B. Jensen, Rudolf Endler, José M. Mogollón  
11<sup>45</sup>-12<sup>00</sup> O81. Geochemical dynamics along  
a transect of gas-free and gas charged sedi  
ments – A detailed study in Aarhus Bay  
Sabine Flury, Henrik Fossing, Hans Røy, Jørn  
B. Jensen, Andrew W. Dale, Bo B. Jørgensen  
12<sup>00</sup>-12<sup>15</sup> O82. Gas-bearing sediments of the  
south-eastern Baltic Sea: acoustical and gas-  
geochemical investigation  
Marina Ulyanova, Vadim Sivkov, Dmitry  
Dorokhov, Timur Kanapatsky,  
Nikolay Pimenov  
12<sup>15</sup>-12<sup>30</sup> O83. Sediment-water and sea-air  
fluxes of methane in Himmerfjärden, Baltic  
Sea  
Volker Bruchert, Livija Ginters, David  
Bastviken, Nguyen Manh Thang,  
Timothy G. Ferdelman  
12<sup>30</sup>-12<sup>45</sup> O84. Production of volatile haloge  
nated organic compounds (VHOCs) in coastal  
Baltic Sea surface waters during a short term  
mesocosm experiment  
Anna Orlikowska, Christian Stolle,  
Falk Pollehne, Klaus Jürgens,  
Detlef E. Schulz-Bull  
12<sup>45</sup>-13<sup>00</sup> O85. Seasonal and spatial distri

bution of methane in the surface water of the Baltic Sea

Wanda Gülzow

13<sup>00</sup>-13<sup>15</sup> O86. Methane oxidation rates in gassy areas across the North Sea, Baltic Sea transition

José M. Mogollón; Andrew W. Dale; Pierre Regnier; Michael Schlüter

13<sup>00</sup>- 14<sup>30</sup> **Hotel Lunch**  
**restaurant**

14<sup>30</sup>- 17<sup>00</sup> **Green 9 3. Coastal-offshore exchange processes.**  
**Conveners: Kai Myrberg, Andreas Lehmann, Vladimir Ryabchenko**

14<sup>30</sup>-14<sup>45</sup> O39. Environmentally safe fairways over fields generated by Lagrangian particles statistics: an application to the Gulf of Finland

Oleg Andrejev, Tarmo Soomere, Alexander Sokolov, Kai Myrberg

14<sup>45</sup>-15<sup>00</sup> O40. Nutrients fluxes via Submarine Groundwater Discharge to the Baltic Sea, extrapolation based on the Bay of Puck study

Beata Szymczycha, Susann Vogler, Olaf Dellwig, Michael Bottcher, Janusz Pempkowiak

15<sup>00</sup>-15<sup>15</sup> O41. Coastal N and P cycling in the southern Baltic proper

Maren Voss, Jacob Carstensen, Claudia Frey, Daniel Conley, Joachim Dippner, Susanna Hietanen, Tom Jilbert, Frederike Korth, Caroline Slomp

**Green 9** 15<sup>15</sup>-15<sup>30</sup> O42. Modelling of sediment resuspension and transport dynamics in the Neva Bay

Stanislav Martyanov, Vladimir Ryabchenko, Alexander Rybalko

15<sup>30</sup>-15<sup>45</sup> O43. Wave and current generated sediment remobilization and wave induced currents in coastal sea

Getli Haran, Victor Alari, Urmas Raudsepp

15<sup>45</sup>-16<sup>00</sup> O44. A statistical approach on upwelling in the Baltic Sea based on the analysis of satellite data for 1990 - 2009

Andreas Lehmann, Kai Myrberg,

Katharina Höflich

16<sup>00</sup>-16<sup>15</sup> O45. Comparing the coastal and offshore dynamics of nutrients and dissolved oxygen in the Baltic Sea by means of numerical modeling

Gennadi Lessin, Adolf Stips,

Svetla Miladinova

16<sup>15</sup>-16<sup>30</sup> O46. Modeling Daugava River water transport in the Gulf of Riga

Edith Soosaar, Urmas Raudsepp, Jüri Elken

16<sup>30</sup>-16<sup>45</sup> O47. Combined SAR/IR satellite data and circulation model analysis of upwelling in the Baltic Sea

Evgenia Gurova, Andreas Lehmann

16<sup>45</sup>-17<sup>00</sup> O48. On parameterization of the sediment-water exchange while modeling of changes of redox conditions in the stratified basins

Evgeniy Yakushev

14<sup>30</sup>-17<sup>00</sup> Blue 3

**5/1. Plankton diversity, functioning and dynamics in the changing Baltic Sea ecosystem.**

**Conveners: Inga Lips, Irena Telesh,**

**Risto Lignell**

14<sup>30</sup>-14<sup>45</sup> O95. Eutrophication of the Neva Estuary: spatial and temporal changes

Mikhail Golubkov

14<sup>45</sup>-15<sup>00</sup> O96. Process studies on the ecological coupling between sea ice algae and

phytoplankton  
Letizia Tedesco, Marcello Vichi,  
 David N. Thomas  
 15<sup>00</sup>-15<sup>15</sup> O97. Long-term changes and controlling factors of phytoplankton community in the Gulf of Riga (Baltic Sea)  
Iveta Jurgensone, Jacob Carstensen,  
 Anda Ikauniece, Baiba Kalveka  
 15<sup>15</sup>-15<sup>30</sup> O98. Phytoplankton dynamics – what new information we obtain by high-resolution sampling?  
Inga Lips, Urmas Lips, Nelli Runk  
 15<sup>30</sup>-15<sup>45</sup> O99. Influence of eutrophication on trophic relations between phytoplankton and zooplankton in the Curonian and Vistula Lagoons (Baltic Sea)  
O.A. Dmitrieva, A.S. Semenova,  
 V.S. Semenova  
 15<sup>45</sup>-16<sup>00</sup> O100. Micro-scale diversity: new data on ciliates in the Baltic Sea  
Ekaterina Mironova, Irena Telesh,  
 Sergei Skarlato  
 16<sup>00</sup>-16<sup>15</sup> O101. Impact of gelatinous top predators on the Baltic pelagic ecosystem  
Peter Tiselius  
 16<sup>15</sup>-16<sup>30</sup> O102. Physical processes influencing the occurrence of the dominant gelatinous plankton in the south-western Baltic Sea  
Christina B. Augustin, Sandra Kube,  
 Peter Menzel  
 16<sup>30</sup>-16<sup>45</sup> O103. Population dynamics and predation impact of the introduced ctenophore *Mnemiopsis leidyi* in the Gullmars fjord on the Swedish Skagerrak coast  
Lene Friis Moller, Peter Tiselius  
 16<sup>45</sup>-17<sup>00</sup> O104. Predation impact by the introduced comb jelly *Mnemiopsis leidyi* on the

- Swedish west coast and in the Baltic Sea  
Lena Granhag
- 14<sup>30</sup>-17<sup>00</sup> Red 11** **6. Impact of changing climate and human-induced pressures on the Baltic Sea eco - system.**  
**Conveners: Markus Meier, Joachim Dippner, Aarno Kotilainen**
- 14<sup>30</sup>-14<sup>45</sup> O120. Distributed assessment of agricultural N losses and N retention in the Baltic Sea drainage basin  
Hans Andersen, Gitte Blicher-Mathiesen, Peter Mejlhede Andersen, Erik Smedberg
- 14<sup>45</sup>-15<sup>00</sup> O121. Comparison of observed and simulated dynamics of biogeochemical cycles in the Baltic Sea during 1970-2005 using three state-of-the-art numerical models  
Kari Eilola, Bo G. Gustafson, Ivan Kuznetsov, H.E. Markus Meier, Thomas Neumann, Oleg P. Savchuk
- 15<sup>00</sup>-15<sup>15</sup> O122. Wind Climate over the Baltic Sea region since 1850  
Frederik Schenk
- Red 11** 15<sup>15</sup>-15<sup>30</sup> O123. Back to the future of the Baltic Sea: integrated sediment proxy and modelling studies in the INFLOW project  
Aarno Kotilainen, Laura Arppe, Slawomir Dobosz, Katharina Häusler, Eystein Jansen, Karoline Kabel, Juha Karhu, Mia Kotilainen, Antoon Kuijpers, Bryan Lougheed, H.E. Markus Meier, Matthias Moros, Thomas Neumann, Christian Porsche, Niels Poulsen, Sofia Ribeiro, Bjørg Risebrobakken, Daria Ryabchuk, Ian Snowball, Mikhail Spiridonov, Joonas Virtasalo, Andrzej Witkowski, Vladimir Zhamoida
- 15<sup>30</sup>-15<sup>45</sup> O124. Assessment of Climate Change for the Baltic Sea - an update

Markus Meier

15<sup>45</sup>-16<sup>00</sup> O125. Effect of climate change on the thermal stratification of the Baltic Sea: a sensitivity experiment

Robinson Hordoir, Markus Meier

16<sup>00</sup>-16<sup>15</sup> O126. Estimates of possible changes in the Baltic Sea ecosystem under different scenarios of land loads and climate changes

Vladimir Ryabchenko, Lev Karlin, Ivan Neelov, Tatjana Eremina, Oleg Savchuk, Roman Vankevich, Alexey Isaev, Sergey Kondratyev, Mikhail Molchanov

16<sup>15</sup>-16<sup>30</sup> O127. Analysis of extreme events in a future climate based on an ensemble simulation for the Baltic Sea ecosystem

Thomas Neumann, Ivan Kuznetsov,

Markus Meier, Kari Eilola

16<sup>30</sup>-16<sup>45</sup> O128. Future nutrient emissions and loads to the Oder River Basin

Jens Huerdler, Markus Venohr

16<sup>45</sup>-17<sup>00</sup> O129. Baltic Sea Time Series updated, and modeling extended to the North Sea  
Ilppo Vuorinen, Jari Hänninen

18<sup>00</sup>-21<sup>00</sup>

**Excursion:**

**1) City sightseeing tour**

**2) Visit to R/V “Elisabeth Mann Borgese” of the Baltic Sea Research Institute, Warnemünde**

**THURSDAY, August 25**

**9<sup>00</sup>-10<sup>40</sup> Blue 4+5 Plenary session 5. Convener: Markus Meier**

9<sup>00</sup>-9<sup>20</sup> L11. Interactions between coastal regions and the open sea in the Baltic Sea: A model study in present and future climate  
Kari Eilola, Elin Almroth-Rosell,  
Christian Dieterich, Anders Höglund,  
H.E. Markus Meier

9<sup>20</sup>-9<sup>40</sup> L12. Trace gas (N<sub>2</sub>O, CH<sub>4</sub>, DMS) measurements at the Boknis Eck Time Series Station (Eckernförde Bay, SW Baltic Sea)  
Hermann Bange, Annette Kock,  
Cathleen Zindler

9<sup>40</sup>-10<sup>00</sup> L13. How will the Baltic Sea acid-base (pH) balance change in future?  
Anders Omstedt and Baltic-C Program Team

10<sup>00</sup>-10<sup>20</sup> L14. The Baltic Sea Monitoring and Forecasting Centre in MyOcean  
Frank Janssen, Vibeke Huess, Jüri Elken,  
Anette Jönsson, Antti Westerlund

10<sup>20</sup>-10<sup>40</sup> L15. The science of ocean colour  
Susanne Kratzer, Roland Doerffer

**10<sup>40</sup>-11<sup>00</sup> Hotel Coffee break  
lobby**

**11<sup>00</sup>-11<sup>45</sup> Blue 4+5 6. Impact of changing climate and human-induced pressures on the Baltic Sea eco - system.**

**Conveners: Markus Meier, Joachim Dippner, Aarno Kotilainen**

11<sup>00</sup>-11<sup>15</sup> O130. Relating Baltic Sea Ecosystem Shifts to Climate Variability

Karin Junker, Joachim W. Dippner

11<sup>15</sup>-11<sup>30</sup> O131. Linear trends, Breakpoints and Regime Shifts: How to assess climate change in the Baltic Sea area?

Adolf Konrad Stips, Madis Lilover,

Svetla Miladinova  
11<sup>30</sup>-11<sup>45</sup> O132 Challenges and unknowns in  
the future climate-response studies of the  
Baltic Sea ecosystem, a food web model sen-  
sitivity analysis

Susa Niiranen, Thorsten Blenckner, Maciej  
Tomczak, Olle Hjerne

**12<sup>00</sup>-13<sup>15</sup> Blue 4+5 8. Operational forecasting in the Baltic Sea  
- from storm surge warnings to ecological  
status information.**

**Conveners: Nicolai Kliem, Urmas Lips,  
Frank Janssen**

12<sup>00</sup>-12<sup>15</sup> O151. Applications of the moored  
profiler Aqualog for research and environ-  
mental monitoring in the European seas

Alexander Ostrovskii, Andrey G Zatsepin

12<sup>15</sup>-12<sup>30</sup> O152. Vertical migration of phyto -  
plankton as an additional upward nutrient  
flux

Urmas Lips, Inga Lips, Taavi Liblik, Nelli  
Runk, Irina Suhhova, Villu Kikas, Aet Meerits

12<sup>30</sup>-12<sup>45</sup> O153. Modeling of extreme values  
of water level and the influence of closing  
of the St.-Petersburg Flood Protection  
Barrier on the level in the Eastern Gulf of  
Finland

Konstantin Klevanny, Alexander Averkiev

12<sup>45</sup>-13<sup>00</sup> O154. The study of oil pollution  
distribution in ice conditions in the Gulf of  
Finland based on the operational forecasting  
system

Stanovoy V.V., Isaev A.V., Neelov I.A.,

Vankevich R.E., Ryabchenko V.A.,

Eremina T.R.

13<sup>00</sup>-13<sup>15</sup> O204. MEDSLIK: an advance de-  
cision support system for marine safety in the  
European seas

- George Zodiatis, Robin Lardner, Dan Hayes, Stavros Stylianou, Dmytro Soloyov, Andreas Nikolaidis, Georgios Georgiou, Xenia Panayidou, Gregory Konnaris
- 11<sup>00</sup>-12<sup>00</sup> Blue 3** **3. Coastal-offshore exchange processes.**  
**Conveners: Kai Myrberg, Andreas Lehmann, Vladimir Ryabchenko**  
 11<sup>00</sup>-11<sup>15</sup> O49. SAR imaging of the coastal upwelling in the Baltic Sea  
Igor Kozlov, Vladimir Kudryavtsev, Johnny Johannessen, Inga Dailidiene, Alexander Myasoedov  
 11<sup>15</sup>-11<sup>30</sup> O50. Flaw leads as natural fairways in the Gulf of Finland  
Ove Pärn  
 11<sup>30</sup>-11<sup>45</sup> O51. Near bottom dynamics measurements in coastal waters of NW Estonia  
Ants Erm, F. Buschmann, V. Alari, K. Rosin, J. Rebane, M. Listak  
 11<sup>45</sup>-12<sup>00</sup> O52. Specific features of the seasonal structural thermal front development in the Baltic Sea after cold winters  
Natalia Demchenko
- 12<sup>00</sup>-13<sup>00</sup> Blue 3** **6/1. Environmental geology and geological hazards of the Baltic Sea bottom and its coastal zones.**  
**Conveners: Henry Vallius, Vladimir Zhamoïda, Hannes Tõnisson, Daria Ryabchuk, Jan Harff**  
 12<sup>00</sup>-12<sup>15</sup> O133. Are there earthquake triggered modern seafloor mass movements in the Baltic Sea?  
Aarno Kotilainen, Kimmo Alvi, Anu Marii Kaskela  
 12<sup>15</sup>-12<sup>30</sup> O134. Artificial macro-objects and anthropogenic activity at the Baltic Sea bottom as significant factors affected natural se-

dimentation processes  
Vladimir Zhamoida, Daria Ryabchuk,  
Jury Kropachev, Mikhail Spiridonov  
12<sup>30</sup>-12<sup>45</sup> O135. Gulf of Finland revisited -  
decadal change in heavy metal loads

Henry Vallius

12<sup>45</sup>-13<sup>00</sup> O136. Sediment phosphorus studies  
in the archipelagos of SW Finland, W Uusi -  
maa and Åland in the SEABED project

Puttonen Irma, Kohonen Tuula,  
Ahlman Mikaela, Suomela Janne,  
Wennström Mikael, Mattila Johanna

11<sup>00</sup>-11<sup>45</sup> Red 11

**5/1. Plankton diversity, functioning and  
dynamics in the changing Baltic Sea eco -  
system.**

**Conveners: Inga Lips, Irena Telesh,  
Risto Lignell**

11<sup>00</sup>-11<sup>15</sup> O105. Distribution and reproduction  
potential of the Arctic comb jelly *Mertensia  
ovum* in the Baltic Sea – genetic analyses  
reveal a long history for a new species

Maiju Lehtiniemi, Sören Bolte,  
Holger Haslob, Elena Gorokhova,  
Bastian Huwer, Tarja Katajisto,  
Lennart Lennuk, Arno Põllumäe,  
Matthias Schaber, Outi Setälä,  
Thorsten B.H. Reusch, Satu Viitasalo-Frösén,  
Ilppo Vuorinen, Pentti Välipakka

11<sup>15</sup>-11<sup>30</sup> O106. Population modelling of co-  
pepods in the Gulf of Gdansk

Lidia Dzierzbicka-Glowacka,  
Iwona M. Zmijewska, Anna Lemieszek,  
Jaromir Jakacki, Stella Mudrak,  
Maciej Janecki

11<sup>30</sup>-11<sup>45</sup> O107. Feeding ecology of European  
perch (*Perca fluviatilis*) in the Gulf of Riga,  
Baltic Sea

- 11<sup>45</sup>- 13<sup>00</sup> Red 11** Lina Livdane  
**5/2. Biodiversity, productivity and the indicative role of bottom communities.**  
**Conveners: Teresa Radziejewska, Sergei Golubkov, Erik Bonsdorff**  
 11<sup>45</sup>-12<sup>00</sup> O108. An approach to assess consequences of natural disturbance events for benthic ecosystem functioning  
Mayya A. Gogina, Alexander Darr, Michael L. Zettler  
 12<sup>00</sup>-12<sup>15</sup> O109. Invasion by polychaete *Marenzelleria arctica* alters response of soft-bottom community to hypoxic events in the eastern Gulf of Finland  
Alexey A. Maximov  
 12<sup>15</sup>-12<sup>30</sup> O110. Importance of remnant *Fucus vesiculosus* vegetation for associated fauna and macroalgae in Kiel Bight  
Rolf Karez, Gesche Bock, Renate Schütt, Mark Lenz, Martin Wahl  
 12<sup>30</sup>-12<sup>45</sup> O111. Does the new prawn *Palaemon elegans* fit into the Baltic Sea ecosystem?  
Urszula Janas, Malgorzata Pilka, Anna Barańska  
 12<sup>45</sup>-13<sup>00</sup> O112. Macrophytobenthos of the Gulf of Gdansk (southern Baltic Sea). Structure and function – preliminary results  
Aleksandra Zgrundo, Marcelina Ziolkowska, Adam Sokolowski
- 13<sup>00</sup>-14<sup>30</sup> Restaurant Lunch**  
**14<sup>30</sup>-16<sup>00</sup> Green 9** **6/1. Environmental geology and geological hazards of the Baltic Sea bottom and its coastal zones.**  
**Conveners: Henry Vallius, Vladimir Zhamoida, Hannes Tönisson, Daria Ryabchuk, Jan Harff**  
 14<sup>30</sup>-14<sup>45</sup> O137. Acoustics methods used in

shallow gassy sediments detection and classification in the Baltic Sea PEZ

Zygmunt Klusek, Piotr Majewski

14<sup>45</sup>-15<sup>00</sup>O138. Impact of marine sand extraction on the seabed relief and sediments

Szymon Uscinowicz, Wojciech Jeglinski, Regina Kramarska,

Grazyna Miotk-Szpiganowicz,

Urszula Paczek, Piotr Przedziecki

15<sup>00</sup>-15<sup>15</sup>O139. Changes in the intensity of shore processes along the Estonian coast

Hannes Tõnisson, Kaarel Orviku,

Ülo Suursaar, Are Kont

15<sup>15</sup>-15<sup>30</sup>O140. The development of coastal landscapes in North-Estonia and on the Island of Hiiumaa

Kadri Vilumaa, Urve Ratas

15<sup>30</sup>-15<sup>45</sup>O141. Changes in Aeolian Coastal Landscapes of Tahkuna Peninsula, Estonia

Agnes Anderson

15<sup>45</sup>-16<sup>00</sup>O142. Comparative analyze of marine origin impact craters Neugrund and Kärddla (Baltic Sea, Estonia)

Sten Suuroja, Kalle Suuroja

**16<sup>00</sup>-17<sup>00</sup> Green 9 9. Modeling as support for management.**

**Conveners: Bo Gustafsson, Markus Meier, Christoph Humborg**

16<sup>00</sup>-16<sup>15</sup>O165. Integration of nutrient to fish dynamics in an Eulerian model

Wolfgang Fennel, Hagen Radtke,

Thomas Neumann

16<sup>15</sup>-16<sup>30</sup>O166. Net anthropogenic nutrient inputs to Baltic Sea catchment regional Riverine nutrient input/export patterns and implications for nutrient management strategies

Christoph Humborg, Fredrik Wulff,

Carl-Magnus Mörtz, Hanna Hägg,

Erik Smedberg, Bongghi Hong,  
Dennis P Swaney  
16<sup>30</sup>-16<sup>45</sup>O167. Simulating climate and nutri-  
ent changes in the Baltic Sea  
Rene Friedland, Thomas Neumann,  
Gerald Schernewski  
16<sup>45</sup>-17<sup>00</sup>O168. BALTSEM - a marine model  
for decision support on the Baltic Sea  
Oleg P. Savchuk, Bo G. Gustafsson,  
Bärbel Müller-Karulis

14<sup>30</sup>-15<sup>30</sup> Blue 3

**8. Operational forecasting in the Baltic Sea  
- from storm surge warnings to ecological  
status information.**

**Conveners: Nicolai Kliem, Urmas Lips,  
Frank Janssen**

14<sup>30</sup>-14<sup>45</sup>O155. Prediction of Ocean State  
Estimate by assimilation of temperature and  
salinity data. A case study for the Baltic Sea  
Joanna Staneva, Johannes Schulz-Stellenfleth,  
Sebastian Grayek, Emil Stanev

14<sup>45</sup>-15<sup>00</sup>O156. Validation of MyOcean Baltic  
modeling products

Priidik Lagemaa, Germo Vali, Jüri Elken,  
Frank Janssen, Sonja Dorendorf,  
Simon Jandt, Thorger Brüning,  
Antti Westerlund, Lars Axell, Vibeke Huess

15<sup>00</sup>-15<sup>15</sup>O157. Baltic Operational Oceano-  
graphy – present status, weaknesses and  
knowledge gaps

Bertil GM Hakansson

15<sup>15</sup>-15<sup>30</sup>O158. The Gotland Deep Environ-  
mental Sampling Station in the Baltic Sea

Ralf D Prien, Detlef E Schulz-Bull

15<sup>30</sup>-17<sup>00</sup> Blue 3

**8/1. Satellite remote sensing of hydrome-  
teorological and ecological processes in the  
Baltic Sea: methods and applications.**  
**Conveners: Dmitry Pozdnyakov,**

**Vladimir Volkov, Tiit Kutser**

15<sup>30</sup>-15<sup>45</sup> O159. Mapping Baltic Sea shallow water environments with high spatial resolution remote sensing

Tiit Kutser, E. Vahtmäe, J. Kotta, M. Pärnoja, T. Möller, L. Lennuk

15<sup>45</sup>-16<sup>00</sup> O160. Benthic habitat change detection by satellite remote sensing in the Baltic Sea coastal environments

Ele Vahtmäe, Tiit Kutser, Jonne Kotta

16<sup>00</sup>-16<sup>15</sup> O161. Satellite observations for improving coastal zone management

Therese Harvey, Susanne Kratzer, Petra Philipson

16<sup>15</sup>-16<sup>30</sup> O162. Remote Sensing in coastal areas. Challenges of working with MERIS images in the Baltic Sea

Jose M. Beltran-Abaunza, Susanne Kratzer

16<sup>30</sup>-16<sup>45</sup> O163. SAR high-resolution mapping of wind field in the Gulf of Finland

Alexander Myasoedov,

Vladimir Kudryavtsev, Igor Kozlov

16<sup>45</sup>-17<sup>00</sup> O164. Examination of sea ice parameters based on remote sensing methods during winter 2011

Aleksandra Mazur

14<sup>30</sup>-16<sup>15</sup> Red 11

**5/2. Biodiversity, productivity and the indicative role of bottom communities.**

**Conveners: Teresa Radziejewska, Sergei Golubkov, Erik Bonsdorff**

14<sup>30</sup>-14<sup>45</sup> O113. The effect of benthic community structure and health on oxygen and nutrient fluxes under different environmental conditions

Halina Rzemykowska, Katarzyna Łukawska-Matuszewska, Urszula Janas, Dorota Burska, Anna Szaniawska

14<sup>45</sup>-15<sup>00</sup> O114. BaltMar habitat classification in Marine Protected Areas of Eastern Baltic  
Vadims Jermakovs

15<sup>00</sup>-15<sup>15</sup> O115. Assessment of the state of the Neva Estuary using zoobenthos  
E. V. Balushkina

15<sup>15</sup>-15<sup>30</sup> O116. A coastal infrastructure as an island of epibiontic life on the southern Baltic shallow sandy bottom: temporal evolution of a fouling community on a tourist resort sea-bridge

Malgorzata Bak, Marcin Wroniecki, Teresa Radziejewska, Brygida Wawrzyniak-Wydrowska

15<sup>30</sup>-15<sup>45</sup> O117. Pelagic-benthic decoupling in the ecosystem of the Neva Estuary (Gulf of Finland): the role of natural and anthropogenic factors

Sergei Golubkov, Alexey Maximov

15<sup>45</sup>-16<sup>00</sup> O118. Long-term recovery of a degraded estuarine water body. An example from the River Odra estuary

Adam Wozniczka, Norbert Wolnomiejski, Stanislaw Sitek, Agnieszka Szkudlarek – Pawelczyk, Aneta Jakubowska

16<sup>00</sup>-16<sup>15</sup> O119. Predictive modelling of benthic assemblages: performance of modelling techniques in a Baltic-wide perspective

Martynas Bucas, Anna-Leena Downie, Ulf Bergström, Mats Lindegarth, Martin Gullström, Göran Sundblad, Karl Floren, Nicklas Wijkmark, Andrius Slaulys, Aleksey Saskov

16<sup>15</sup>-17<sup>00</sup> Red 11

**7. The carbon/CO<sub>2</sub> cycle and the acid-base (pH) balance in semi-enclosed and shelf seas:**

**Present state and anthropogenic impacts.**

**Conveners: Anders Omstedt, Anna Rutgersson-Owenius, Bernd Schneider**  
16<sup>15</sup>-16<sup>30</sup>O143. The CO<sub>2</sub> system of the northern Baltic Sea at the beginning of the last century - An appraisal of Kurt Buch

Bernd Schneider

16<sup>30</sup>-16<sup>45</sup>O144. Contribution of rivers Odra and Vistula to Baltic Sea Carbon Cycle

Jacek Beldowski, Karol Kulinski,

Bernd Schneider

16<sup>45</sup>-17<sup>00</sup>O145. Determination of both organic carbon and total nitrogen accumulation rates in the Baltic sediment cores

Aleksandra Szczepanska, Agata Zaborska,

Anna Maciejewska, Karol Kulinski,

Janusz Pempkowiak

14<sup>30</sup>- 17<sup>00</sup> Red 7

17<sup>00</sup>-18<sup>30</sup> Hotel lobby

20<sup>00</sup>-23<sup>00</sup> Cruise boat

ABNORMAL workshop

**Poster session 3**

**Congress dinner**

**FRIDAY, August 26**

**9<sup>00</sup>-10<sup>40</sup> Blue 4+5 Plenary session 6.**

**Convener: Anders Omstedt**

9<sup>00</sup>-9<sup>20</sup> L16. Science meet management in the revision of the Baltic Sea Action Plan against eutrophication of the Baltic Sea

Fred Wulff, Christoph Humborg,

Bo Gustafsson, Magnus Mörth,

Oleg Savchuk, Alexander Sokolov

9<sup>20</sup>-9<sup>40</sup> L17. Nutrient load reductions in future climate of the Baltic Sea - assessment of uncertainties

Markus Meier, Helén Andersson,

Christian Dieterich, Kari Eilola,

Bo Gustafsson, Anders Höglund,

Robinson Hordoir, Ivan Kuznetsov,

Thomas Neumann, Oleg Savchuk,

Semjon Schimanke

9<sup>40</sup>-10<sup>00</sup> L18. Hypoxia in a historical perspective – indicators of change

Jacob Carstensen, Daniel Conley,

Bo Gustafsson

10<sup>00</sup>-10<sup>20</sup> L19. Climate change assessments as a service to society: The BACC example

Marcus Reckermann, Hans-Joerg Isemer,

Hans von Storch, Anders Omstedt

10<sup>20</sup>-10<sup>40</sup> L20. Managing the lack of scientific knowledge on the Baltic Sea environment

Mikael Karlsson, Michael Gilek

**10<sup>40</sup>-11<sup>00</sup> Hotel lobby**

**Coffee break**

**11<sup>00</sup>-13<sup>15</sup> Blue 4+5 9. Modeling as support for management. Conveners: Bo Gustafsson, Markus Meier, Christoph Humborg**

11<sup>00</sup>-11<sup>15</sup> O169. Recent development of the decision support system Baltic Nest

Alexander Sokolov, Bo Gustafsson,

Christoph Humborg, Magnus Mörth,  
Bärbel Müller-Karulis, Miguel Rodriguez  
Medina, Oleg Savchuk, Erik Smedberg,  
Fredrik Wulff

11<sup>15</sup>-11<sup>30</sup> O170. Nitrogen deposition to the  
Baltic Sea – who are the main contributors?

Kaj M. Hansen, Lise M. Frohn, Berit Hasler,  
Allan Gross, Camilla Geels, Jesper H.

Christensen, Jørgen Brandt,

Carsten A. Skjøth, Gitte B. Hedegaard,

Ayoe B. Hansen, Azimeh Zare

11<sup>30</sup>-11<sup>45</sup> O171. Contracting nitrogen load re-  
ductions to the Baltic Proper watershed under  
the risk of climate change

Katarina Elofsson

**Blue 4+5** 11<sup>45</sup>-12<sup>00</sup> O172. Predictive modelling of bio-  
logical structures and functions: a necessary  
and promising tool for spatial planning and  
status assessment in the Baltic Sea

Mats Lindegarth, Martin Gullström,

Martynas Bucas, Göran Sundblad,

Anna-Leena Downie, Ulf Bergström,

Kalle Floren, Niklas Wijkmark,

Mikael von Numers

12<sup>00</sup>-12<sup>15</sup> O173. Modeling changes in Baltic  
Sea nutrient inputs for realistic river basin  
management scenarios

Csilla Farkas, Hans Thodsen, Alexander  
Engebretsen, Jaroslaw Chormanski, Adam  
Was, Kaspars Abramenko, Ainis Lagzdins,  
Hans E. Andersen

12<sup>15</sup>-12<sup>30</sup> O174. The RECOCA model: integ-  
rated modelling to support cost-effective ma-  
nagement of nutrient reductions to the Baltic  
Sea

Berit Hasler, Mikolaj Czajkowski, Katarina  
Elofsson, James C.R. Smart, Adam Was,

Maria T.H. Konrad, Hans E. Andersen,  
Gitte Blicher-Mathiasen, Hans Thodsen,  
Cordula Göke, Magnus Mörtz,  
Erik Smedberg, Tomasz Zylich,  
Christoph Humborg

12<sup>30</sup>-12<sup>45</sup> O175. Evaluating management scenarios for eutrophication in the Baltic Sea using predictive habitat modelling

Anna-Leena Downie, Ulf Bergström,  
Göran Sundblad, Martin Snickars,  
Mats Lindegarth

12<sup>45</sup>-13<sup>00</sup> O176. Reconstruction of the Baltic Sea eutrophication 1850-2000 using coupled physical-biogeochemical models

Bo Gustafsson, Markus Meier, Kari Eilola,  
Oleg Savchuk, Thomas Neumann,  
Bärbel Müller Karulis, Frederik Schenk,  
Eduardo Zorita, Tuija Ruoho-Airola,  
Magnus Mörtz

13<sup>00</sup>-13<sup>15</sup> O177. Differences in emission of nitrogen and phosphorus into the Oder and Vistula basins in 1995-2008 – natural and anthropogenic causes (MONERIS model)

Tomasz Kowalkowski, Marianna Pastuszak,  
Janusz Igras, Bogusław Buszewski

11<sup>00</sup>-12<sup>15</sup> Blue 3

**7. The carbon/CO<sub>2</sub> cycle and the acid-base (pH) balance in semi-enclosed and shelf seas:**

**Present state and anthropogenic impacts.**

**Conveners: Anders Omstedt, Anna Rutgersson-Owenius, Bernd Schneider**

11<sup>00</sup>-11<sup>15</sup> O146. Modelling biogeochemical processes related to the inorganic carbon system in coastal seas and its dependence on oxidation–reduction (redox) reactions

Moa Edman, Anders Omstedt

11<sup>15</sup>-11<sup>30</sup> O147. Simulation of carbon dyna -

mics in the Baltic sea with a 3D model  
Ivan Kuznetsov, Thomas Neumann  
11<sup>30</sup>-11<sup>45</sup> O148. Historical atmospheric acid  
deposition over the Baltic Sea and its drain-  
age basin

Bjorn Claremar, Teresia Wallstedt,  
Anna Rutgersson, Anders Omstedt  
11<sup>45</sup>-12<sup>00</sup> O149. Oceanic convective mixing  
and improved air-sea gas transfer velocity  
Anna Rutgersson  
12<sup>00</sup>-12<sup>15</sup> O150. Carbon export from the Bal-  
tic Sea catchment

Teresia Wällstedt, Carl-Magnus Mörth,  
Erik Smedberg, Bo Gustafsson,  
Christoph Humborg

**12<sup>15</sup>-13<sup>00</sup> Blue 3** **9/1. Assessing the status and the trends of  
the Baltic Sea ecosystem.**

**Conveners: Jacob Carstensen, Laura  
Uusitalo, Kari Lehtonen, Georg Martin,  
Mikhail Shilin**

12<sup>15</sup>-12<sup>30</sup> O183. Integration of biomarker re -  
sponses, tissue contaminant levels and envi-  
ronmental factors in caged mussels (*Mytilus  
edulis*) to assess the health status of coastal  
areas under anthropogenic impact in the nor-  
thern Baltic Sea

Raisa Turja, Kari K. Lehtonen

12<sup>30</sup>-12<sup>45</sup> O184. Sediment quality of the Gulf  
of Finland: bioassay with amphipods

Nadezhda Berezina, Evita Strode,

Sergey Golubkov, Maija Balode

12<sup>45</sup>-13<sup>00</sup> O185. Comparing study of Little Ice  
Age and Modern Warm Period conditions of  
the Baltic Sea by three-dimensional model  
experiments

Christian Porsche, Thomas Neumann

**11<sup>00</sup>-13<sup>00</sup> Red 11** **10. Managing the scientific knowledge on**

**the Baltic Sea environment.**

**Conveners: Michael Gilek,**

**Markku Olikainen**

11<sup>00</sup>-11<sup>15</sup> O191. Shaping up a coherent scientific advice from the marine and maritime sectors

Wojciech Wawrzynski, Jan Thulin

11<sup>15</sup>-11<sup>30</sup> O192. From words to actions Similarities and differences in framing and communication of the eutrophication in the Baltic Sea between different groups of stakeholders

Cecilia M Lundberg

11<sup>30</sup>-11<sup>45</sup> O193. 'Regionalisation' of the EU Common Fisheries Policy: New Prospects for bringing stakeholders' knowledge to bear on management decision-making?

Marion Dreyer, Piet Sellke

11<sup>45</sup>-12<sup>00</sup> O194. Save the Baltic Sea? Knowledge management for the Baltic Sea protection

Nina J. Tynkkynen

12<sup>00</sup>-12<sup>15</sup> O195. Towards Integration of Research Efforts of Baltic Sea Marine Communities in the Field of Developing Knowledge Based Downstream Services

E.V. Stanev, J. She, P. Axe

12<sup>15</sup>-12<sup>30</sup> O196. Knowledge requirements for ecosystem-based management of chemicals: the Baltic Sea case

Michael Gilek, Mikael Karlsson,

Oksana Udovyk

12<sup>30</sup>-12<sup>45</sup> O197. Climate Science: Quality Assessment and Communication

Dennis Bray, Grit Martinez

12<sup>45</sup>-13<sup>00</sup> O198. Economic value of ecosystem services provided by coastal habitats in

Sweden, Finland, and Lithuania  
Anna-Kaisa Kosenius, Markku Ollikainen

**13<sup>00</sup>- 14<sup>30</sup> Restaurant Lunch**

**14<sup>30</sup>- 15<sup>45</sup> Blue 4+5 9. Modeling as support for management.**  
**Conveners: Bo Gustafsson, Markus Meier, Christoph Humborg**

14<sup>30</sup>-14<sup>45</sup> O178. Balt-Hype and BaltHypeWeb – tools for assessment of the effects of the Baltic Sea Action Plan and climate change on hydrology and nutrient loads to the Baltic Sea

Patrik Wallman, Berit Arheimer,  
Kristina Isberg, Joel Dahna

14<sup>45</sup>-15<sup>00</sup> O179. Structure of wind wave fields in the Vistula Lagoon

Dmitry Kurennoy, Boris Chubarenko

15<sup>00</sup>-15<sup>15</sup> O180. Future riverine export of nutrients to the Baltic Sea - Climate change and consumption scenarios

Hanna Eriksson Hägg, Teresia Wällstedt,  
Carl-Magnus Mörth, Christoph Humborg  
15<sup>15</sup>-15<sup>30</sup> O181. Mekong Basin Development and Knowledge Based Decision Making

Juha Sarkkula

15<sup>30</sup>-15<sup>45</sup> O182. The Finnish Inventory Programme for Underwater Marine Environment – from mapping to practical application of results

Kirsi Kostamo, Anna-Leena Downie,  
Markku Viitasalo, Pasi Laihonen,  
Penina Blankett

**14<sup>30</sup>- 15<sup>45</sup> Blue 3 9/1. Assessing the status and the trends of the Baltic Sea ecosystem.**

**Conveners: Jacob Carstensen, Laura Uusitalo, Kari Lehtonen, Georg Martin, Mikhail Shilin**

14<sup>30</sup>-14<sup>45</sup> O186. Climate variations as a fac -

tor influencing the recent hypoxia in the Eastern Gulf of Finland

Tatjana Eremina, A. Maximov, E. Voloschuk  
14<sup>45</sup>-15<sup>00</sup> O187. Modelling oxygen dynamics and hypoxia in the Baltic Sea

Svetla Miladinova, Adolf Konrad Stips  
15<sup>00</sup>-15<sup>15</sup> O188. Analysis of decadal dynamics of eutrophication parameters in the Eastern part of the Gulf of Finland

Tatjana Eremina, Alexandra Ershova,  
Eugenia Lange  
15<sup>15</sup>-15<sup>30</sup> O189. Assessment of benthic flora degradation – a case study of post-dredging pits in the Puck bay, Southern Baltic

Paulina Brzeska, Lidia Kruk-Dowgiallo  
15<sup>30</sup>-15<sup>45</sup> O190 Assessing the status and trends of the coastal ecosystems in the dredging material deposit areas

Mikhail Shilin, Sergey Lukjanov,  
Lubov Zhakova, Julia Lednova

14<sup>30</sup>-15<sup>45</sup> Red 11

**10. Managing the scientific knowledge on the Baltic Sea environment.**

**Conveners: Michael Gilek,  
Markku Olikainen**

14<sup>30</sup>-14<sup>45</sup> O199. Combating Eutrophication – What Simple Arithmetic Tells Us?

Sami Hautakangas, Markku Ollikainen  
14<sup>45</sup>-15<sup>00</sup> O200. Improving societal conditions for the Baltic Sea protection in Finland

*Mia Pihlajamäki*  
15<sup>00</sup>-15<sup>15</sup> O201. Marine biodiversity and conservation in the eastern part of the Baltic Sea

Strake Solvita, Kristine Pakalniete,  
Vadims Jermakovs, Antra Stipniece  
15<sup>15</sup>-15<sup>30</sup> O202. Qualitative assumptions or quantitative calculations - the role of science in marine biosecurity risk assessment using

bioinvasions and the Baltic Sea as a case study

Katarzyna Smolarz, Paulina Lemke,  
Aleksandra Zgrundo, Maciej Wolowicz  
15<sup>30</sup>-15<sup>45</sup> O203. Science and Education for  
Sustainable Development in the Baltic Re-  
gion

Andrey Alimov

**15<sup>45</sup>-16<sup>15</sup> Hotel lobby**

**Coffee break**

**16<sup>15</sup>-17<sup>00</sup> Blue 4+5 Closing ceremony**

## POSTER SESSIONS

*Monday, August 22, 17<sup>50</sup> - 19<sup>00</sup>*

### **1. Late Quaternary geological development of the Baltic Sea: paleoreconstructions - links to the modern climate change**

P1. Reflection of the Holocene events in the pollen spectra of core from the Gulf of Finland

Tatiana Napreenko-Dorokhova

P2. Littorina 14C-PSV-Pb based hybrid geochronology for the Gotland Deep region of the Baltic Sea; suitability and applicability  
Bryan Lougheed, K. Kabel, M. Moros, R. Muscheler, I. Snowball, J. Virtasalo, L. Wacker

P3. Application of TEX86-paleothermometry in the Baltic Sea: Temperature reconstruction of the past 1000 years

Karoline Kabel, Matthias Moros, Christian Porsche, Thorbjørn J. Andersen, Florian Adolphi, Marianne Baas, Jaap S. Sinninghe Damste

P4. Towards a sound chronology for central Baltic Sea sub-surface and long core Littorina Stage sediments

Matthias Moros, Bryan Lougheed, Thorbjørn J. Andersen, Karoline Kabel, Ian Snowball, Aarno Kotilainen, INFLOW consortium

P5. A microfossil record of late-Holocene environmental changes in the Gotland Basin (Baltic Sea) with focus on dinoflagellate cysts

Sofia Ribeiro, Matthias Moros, Antoon Kuijpers

P6. Sediment map of the Baltic Sea

Emelyan Mikhailovich Emelyanov, T. Andren, Saulius Gulbinkas, Jan Harff, Szymon Uscinowicz

P7. Generating digital terrain model and palaeoreconstructions of Narva-Luga Klint Bay area

Merle Muru, Alar Rosentau, Raivo Aunap

**1/1. An interdisciplinary view on Baltic Sea level change– from a global to a regional perspective, from multiyear to decadal scales**

P8. Variability of the sea levels on the Polish coast in the relation to the atmospheric circulation

Tomasz Olechwir

P9. Influence of large scale changes in wind climate on sea level and wave conditions in the coastal waters of Estonia

Ulo Suursaar, Tiit Kullas

P10. Decadal sea-level changes in the Baltic Sea

Birgit Hünicke, Eduardo Zorita

**1/2. Geology and Archaeology: Submerged Holocene Baltic landscapes**

P11. Baltic ecosystem biodiversity analysis by remote sensing data (paleogeographic aspect)

Sergey Kritsuk, Tamara Teplyakova

P12. Paleogeographic reconstruction of the coastal zone at the mouth of the river Okhta during the Neolithic Epoch (settlement Okhta-I, the lower cultural layer)

Alexander Sergeev, Vikentiy Glukhov

P13. Reconstructing the post-glacial history of the Tõrvajõe basin in NE Estonia

Hanna Raig, Alar Rosentau, Kersti Kihno

P14. History of vegetation and human activity in the surroundings of Lake Racze in the Pyrzyce Region, NW Poland

Karolina Brzozowska, Małgorzata Latałowa, Ryszard Krzysztof Borówka

## **2. Transport and mixing in the Baltic Sea and other stratified basins**

P15. Variability of temperature and salinity over the last decade in selected regions of the Baltic Sea

Daniel Rak

P16. Suspended sediments transport by wind driven and density flows in the Petrozavodsk bay of Onega Lake

Irina Ivanova, Boris Samolyubov

P17. Energy- and mass-transfer in the systems of stratified currents

Boris Samolyubov

P18. Unstructured grid finite element modelling of stratified estuarine and coastal flows

Tuomas Karna, Vincent Legat, Eric Deleersnijder, Hans Burchard

P19. Comparison of thermohaline fields during the little Baltic inflow in winter 2009 and great inflow in winter 2003

Nikolay Golenko, A. Beszczynska-Moller, M.N. Golenko, S.A.Shchuka

P20. Formation of intermediate layers in internal seas.

Olga Kozlova, Natalia Stepanova

P21. Short-term variability of vertical thermohaline structure and currents in the Gulf of Finland

Taavi Liblik, Urmas Lips

P22. Decadal variability of water transport into the Baltic Sea through the Kattegat and Skagerrak straits

Mikhail Dobrynin, Lars Jonasson

P23. Thermohaline structure of water in the south-east Baltic Sea in 2003-2006 years on the basis of field data

Natalia Chubarenko, Irina Chubarenko

### 3. Coastal-offshore exchange processes

P24. The influence of ice on the coastal environment in the Baltic Sea

Matti Leppäranta

P25. On the vertical distribution of the kinetic energy in the Gulf of Finland inferred from bottom-mounted ADCP measurements

Lembit Talpsepp, Madis-Jaak Lilover

P26. Low-frequency currents over the southern slope of the Gulf of Finland

Irina Suhhova, Juss Pavelson, Priidik Lagemaa

P27. Optical inhomogeneity of the surface waters caused by thermal fronts in the southern Baltic Sea

Katarzyna Bradtke, Lena Szymanek

P28. Contribution from remote sensing to support the ship-borne in-situ measurements in the marine and coastal waters of the Baltic Sea

Andrei Ivanov, Tatyana Bukanova, Sergey Shchuka

P29. Influence of typical wind loads on the peculiarity of circulation regimes in Vistula lagoon (the Baltic Sea)

Elena Esiukova, Boris Chubarenko, L. Leitsina

P30. Modelling of slope/deep-sea exchange due to autumnal cooling in South-East Baltic

Elena Esiukova, Irina Chubarenko

P31. On coastal water dynamics near Sambian Peninsula (South-East Baltic) by remote sensing data

Evgenia Gurova

P32. Nutrient loads to the Vistula Lagoon of the Baltic Sea under the effect of climate changes and anthropogenic pressure

Julia Gorbunova

P33. Meteorological monitoring in coast of the south-east Baltic Sea in 1996-2010

Rudolf Abramov, Oleg Goushchin, Svetlana Navrotskaya, Zhanna Stont

P34. A multi-isotope and trace element study on highly anoxic groundwaters escaping from coastal sands of the southern Baltic Sea

Susann Vogler, O. Dellwig, P. Escher, B. Szymczycha, T. Gentz, L. Kotwicki, U. Struck, S. M. Weise, C.-M. Mörth, M. Schlüter, M. E. Böttcher

#### **4. Interplay of physical, biological and geological processes in various spatial and temporal scales**

P35. Transformation of large-amplitude nonlinear wave in shallow water

Artem Rodin, Efim Pelinovsky

P36. Wave energy resources in Estonian territorial sea

Victor Alari

P37. Distribution, vertical structure and seasonal variability of horizontal currents near the Curonian Spit in southeastern Baltic Sea in 2010

Oxana Kurkina, Andrey Kurkin, Dmitry Dorokhov, Vladimir Gorbatsky, Evgeny Morozov, Artem Pankratov

P38. New Baltic Sea coupled ice-ocean-ecosystem model

Maciej Janecki, Jaromir Jakacki, Artur Nowicki, Lidia Dzierzbicka-Glowacka

P39. Life-time estimates for weak-amplitude freak waves caused by the dispersive focusing mechanism

Ekaterina Shurgalina, Efim Pelinovsky, Ira Didenkulova

P40. Optical monitoring of NW Estonian coastal waters in 2008 – 2010

F. Buschmann, A. Erm, M.-L. Konts, N. Buhhalko

P41. Statistical analysis of modeled ice categories in the Baltic Sea (1962-2007)

U. Löptien, A. Höglund, S. Mårtensson, H.E.M. Meier

P42. Long term changes in hydroclimatic variability at the South Eastern Baltic Sea coast

Inga Dailidienė, Loreta Kelpšaitė

P43. In situ determination of iron(II) in the anoxic zone of the Central Baltic Sea using ferene as spectrophotometric reagent

David Meyer, Ralf Prien, Olaf Dellwig, Douglas Connelly, Detlef Schulz-Bull

P44. Surface wettability parameters of seawater submerged structures as novel indicators of pollution level: In-situ captive bubble contact angle studies

Stanislaw J. Pogorzelski

P45. Analysis of temporal and spatial variation in the relationship between light attenuation and Secchi depth in Danish monitoring data

Ciaran Murray, Stiig Markager

P46. Simulation of suspended particle transport in the bottom layer south-east Baltic

Dmitry Lyzhkov

*Tuesday, August 23, 17<sup>30</sup> - 19<sup>00</sup>*

## **5. Mechanisms behind biological variability in the Baltic Sea environment**

P51. N/P Ratio of nutrient uptake in the Baltic Sea  
Zhenwen Wan

P52. Comparison of pelagic food web structure in sub-basins of the White Sea and the Baltic Sea  
Andrey Semushin, Agneta Andersson

P53. Feeding of an invasive crab *Eriocheir sinensis* in the coastal Baltic waters  
Magdalena Jakubowska, Dagmara Wójcik, Agata Kolasa, Joanna Krzak, Monika Normant

P54. Feeding of the non-native crab *Rhithropanopeus harrisi* in the coastal Baltic waters  
Joanna Hegele-Drywa, Magdalena Jakubowska, Monika Normant

P55. The results of environmental monitoring of the Technical Sulfur Transfer Terminal (TSTT) construction area in the Luga Bay of the Gulf of Finland  
O.A. Kiyko, E.K. Lange, S.M. Usenkov, I.A. Stogov

### **5/1. Plankton diversity, functioning and dynamics in the changing Baltic Sea ecosystem**

P56. Changes in structure and abundance of planktonic crustaceans at the beginning of the XXI century in the Gulf of Gdansk (Baltic Sea)  
Stella Mudrak-Cegiolka, Marcin Kalarus, Lidia Dzierzbicka-Glowacka, Maria Iwona Zmijewska

P57. Winter zooplankton in the Curonian and Vistula lagoons, the Baltic Sea

Julia Polunina, Anastasya A. Glazunova

P58. Marine ecosystem model for the Baltic Sea

Maciej Janecki, Jaromir Jakacki, Artur Nowicki, Lidia Dzierzbicka-Glowacka

P59. The invaders in the Curonian and the Vistula lagoons of the Baltic Sea

Elena Naumenko

P60. The first record of the Ponto-Caspian cladoceran *Evadne anonyx* in the Vistula Lagoon, Baltic Sea

Anastasya Glazunova, Julia Polunina, Natalia Rodionova

P61. The dependence between primary production and environmental factors in coastal zone of the south-eastern part of Gdansk Basin

Elena Kudryavtzeva, Vadim Sivkov, Sergey Aleksandrov, Olga Dmitrieva, Timur Kanapatskiy

P62. The percentage of dead organisms in the zooplankton of the Vistula and the Curonian lagoons as indicator of salinity changing and water “blooms”

Anna S. Semenova

P63. The seasonal changes and trophic relations between phytoplankton and zooplankton in the Baltic Sea

O.A. Dmitrieva, A.S. Semenova, N.N. Zhigalova

P64. Nutrient limited bacteria do not respond to cascading effects elicited by a gelatinous top-predator in a Baltic Sea web

Julie Dinasquet, Lena M. Granhag

P65. Feeding of the Arctic comb jelly *Mertensia ovum* in the Baltic Sea

Sanna Kristiina Markkula,

O. Setälä, M. Lehtiniemi, J. Talvitie

P66. Primary production, eutrophication and pollution of the South-Eastern Baltic

Sergey V. Aleksandrov

P67. Mapping of sub-surface maxima of phytoplankton biomass by a towed undulating vehicle

Andres Trei, Inga Lips, Urmas Lips

P68. *Cercopagis pengoi* Ostroumov 1891 as an invasive species in the Vistula Lagoon

Ewa Paturej

P69. Role of molecular-genetic and morphological diagnosis in the study of the Baltic Sea invasive species

Natalia Sukhikh

## **5/2. Biodiversity, productivity and the indicative role of bottom communities**

P70. Gastropod mollusks of the Curonian Lagoon of the Baltic Sea

Dmitry Filippenko

P71. Depth distribution of macroalgae in the South-Eastern Baltic Sea, Russian part

Alexandra Volodina

P72. Impacts of chemical and physical factors on zoobenthos in time and space in the northern Baltic Sea

Heta Rousi, Erik Bonsdorff, Heikki Peltonen, Jouko Rissanen

P73. Production characteristics of *Macoma balthica* (Linnaeus, 1758) in the south-eastern part of the Baltic Sea

Andrey A. Gusev, Elena M. Juergens-Markina

P74. A welcome can of worms? Hypoxia mitigation by an invasive species

Joanna Norkko, Daniel C. Reed, Karen Timmermann, Alf Norkko,

Bo G. Gustafsson, Erik Bonsdorff, Caroline P. Slomp, Jacob Carstensen, Daniel J. Conley

P75. Pilot estimation of species biodiversity of macroalgae on water areas of creating strict nature reserve “Ingermanlandsky”

Nikolay A. Kovalchuk

P76. *Hypania invalida* Grube 1860, a polychaete species new for the River Odra estuary (southern Baltic Sea)

Adam Wozniczka, Slawomira Gromisz, Norbert Wolnomiejski

P77. Life in ballast tanks of ships docked in the Ship Repair Yard in Szczecin (the River Odra estuary, southern Baltic Sea)

Piotr Gruszka, Joanna Rokicka-Praxmajer, Joanna Cupak, Teresa Radziejewska

P78. Population genetic study of European whitefish (*Coregonus lavaretus* L.) of the Gulf of Finland and Lake Ladoga

Dmitry S. Sendek

P79. Macrofaunal communities of mixed sediment bottoms along the northern coast of Sambian Peninsula, the South-Eastern Baltic Sea

Elena Ezhova, Vladimir Zhamoida, Olga Kocheshkova

P80. Temporal and spatial differences of primary production in coastal lagoon waters

Ronny Marquardt, Norman Reuter, Petra Nowak, Uwe Selig, Arne Schoor, Rhena Schumann, Claudia Wranik, Hendrik Schubert

P81. Influence of macrophytes on phosphorus pools and productivity in a shallow bay of the Darss-Zingst Bodden chain

Claudia Wranik, Ronny Marquardt, Jenny Moehring, Petra Nowak, Norman Reuter, Uwe Selig, Arne Schoor

P82. The role of abiotic factors on spatial distribution of dominant zoobenthic species in the northwestern coastal sea of Estonia

Natalja Kolesova, Andres Kask, Victor Alari, Urmas Raudsepp

## **6. Impact of changing climate and human-induced pressures on the Baltic Sea ecosystem**

P83. Changes in the Central Baltic Sea Ecosystem During the 20th Century

M.T.Tomczak, M.Eero, B.R.MacKenzie, S.Niiranen, T.Blenckner

P84. Dynamics of nutrients in near – bottom waters and on water – sediment interface in the Gulf of Riga.

Elvita Eglite, Rita Poikane, Juris Aigars, Maris Skudra

P85. Pharmaceuticals residues in the southern Baltic Sea

Ksenia Pazdro, Grzegorz Siedlewicz, A.Białk-Bielinska, Piotr Stepnowski, Jacek Beldowski

P86. Modelling the biogeochemical changes in the Baltic Sea with RCO-SCOBI from 1850-2007.

Kari Eilola, H.E. Markus Meier

P87. Effects of multiple stressors on Baltic Sea organisms and communities

Linda Kumblad, Ann-Kristin Eriksson Wiklund,

Hanna M. Oskarsson

P88. Changes in zooplankton community structure induced by natural factors and human induced pressures in the Gulf of Finland of the Baltic Sea

Larisa F. Litvinchuk

P89. Influence of the technogenic press on the Luga Bay biota of the Gulf of Finland

O.N.Susloparova, A.S.Shuruhin, O.B.Maximova,  
V.A.Ogorodnikova, Y.A.Zuyev, .A.Ljashenko

P90. Fluctuation of shallow groundwater level of the Leba-Gardno

Coastal Plain, Polish coast

Jolanta Czerniawska

## **6/1. Environmental geology and geological hazards of the Baltic Sea bottom and its coastal zones**

P91. Temporal variability of phosphorus forms in the settling particulate matter in the Archipelago Sea, SW Finland

Tuula Kohonen, Kaarina Lukkari, Irma Puttonen, Johanna Mattila

P92. Dynamic bottom types and sediment contamination of the eastern Gulf of Finland, Baltic Sea

Sviatoslav Usenkov

P93. New knowledge and new questions in relation to the possible environmental impacts of large off-shore installations in the Baltic Sea

Urmas Lips, Villu Kikas, Irina Suhhova, Andres Trei, Fred Buschmann, Kersti Junalainen

P94. Distribution of metals in sediment of the coastal zone of the Gulf of Riga and open part of the Baltic Sea

Zinta Seisuma, Irina Kulikova

P95. Municipal and industrial effluents as potential sources of hazardous substances

Solvita Strake, Rita Poikane, Ieva Putna, Maija Balode

P96. Stabilization technology for sustainable management of contaminated sediments in the Baltic Sea

Grazyna Sapota, Goran Holm

*Thursday, August 25, 17<sup>00</sup> - 18<sup>30</sup>*

#### **4/1. Production, transport, and emission of trace gases**

P47. Polycyclic aromatic hydrocarbons (PAHs) in suspended PM10 particles in urbanized coastal zone as a source of airborne contamination of the marine sediments

Ludwik Lubecki, Grazyna Kowalewska

P48. Using stable carbon isotope ratios of CH<sub>4</sub> and CO<sub>2</sub> to follow the production and consumption of CH<sub>4</sub> along the south to north salinity gradient in the Baltic Sea

Laura Lapham, Sabine Flury, Henrik Fossing, Volker Brüchert, Tim Ferdelman, Nguyen Manh Thang, Livija Ginters, Bo Barker Jørgensen

P49. Indications for microbially mediated methane oxidation in the water column of the central Baltic Sea (Gotland Deep and Landsort Deep)

Gunnar Jakobs, Oliver Schmale, Martin Blumenberg, Gregor Rehder

P50. Geoacoustic characterization and estimation of the shallow gas content in Baltic Sea sediments

Zsuzsanna Toth, Volkhard Spiess

#### **7. The carbon/CO<sub>2</sub> cycle and the acid-base (pH) balance in semi-enclosed and shelf seas: Present state and anthropogenic impacts**

P97. Carbon budget of the Baltic Sea

Aleksandra Szczepanska, Karol Kulinski, Janusz Pempkowiak

P98. The Gulf of Bothnia – a source or a sink for CO<sub>2</sub> in the atmosphere?

Annekatriin Loeffler, Bernd Schneider, Matti Perttila, Gregor Rehder

P99. Impact of varying transfer velocity in a biogeochemical model

Maria Norman, Anna Rutgersson, Anders Omstedt, Erik Sahlée

P100. The effect of marine acidification on the benthic vegetation in the conditions of NE Baltic Sea

Liina Pajusalu, Georg Martin

## **8. Operational forecasting in the Baltic Sea - from storm surge warnings to ecological status information**

P101. Environment conditions modeling of South Baltic using geographical information technologies

Stanislav Glushchenko, Chernyshkov P. Pavel

P102. Measurements in the southern Baltic Sea for better understanding of hydrophysical processes and for HIROMB numerical model validation

Antoni Staskiewicz, Sergey Shchuka, Maciej Kalas

P103. Some results of meteorological monitoring on the sea platform (2004 -2010)

Zhanna Stont, Oleg Goushchin

## **8/1. Satellite remote sensing of hydrometeorological and ecological processes in the Baltic Sea: methods and applications**

P104. Evaluation of suitable seal breeding areas relating of ice types retrieved from satellite imagery.

Liis Sipelgas, Ivar Jussi, Rivo Uiboupin

P105. Results of satellite monitoring of oil pollution in the North-Eastern Baltic in 2006-2010

Tatiana Bukanova, Elena Bulycheva

P106. Development of the regional bio-optical algorithms for the South-Eastern Baltic

Tatiana Bukanova, Svetlana Vazyulya, Oleg Kopelevich,  
Vladimir Burenkov, Anatoliy Grigoriev, Sergey Sheberstov,  
Aleksander Khrapko, Sergej Aleksandrov

P107. Validation of MERIS chlorophyll a products in the Lithuanian Baltic Sea case 2 coastal waters

Diana Vaiciute

P108. Estimation of wind field parameters from C-band SAR in the Gulf of Riga: a pilot baseline study for wind farming

Rivo Uiboupin, Germo Vali

P109. Mapping SST changes in the Baltic Sea Curonian Lagoon with MODIS satellite data

Inga Dailidiene, Igor Kozlov, Toma Mingelaite

P110. Wind field mapping along the Lithuanian Baltic Sea coast: high-resolution SAR wind maps vs. buoy and in situ measurements

Igor Kozlov, Inga Dailidiene

P111. Polar low study over the Baltic Sea using satellite remote sensing measurement data

Julia E. Smirnova, Elizaveta V. Zabolotskikh, Leonid P. Bobylev

P112. Using multi-temporal remote sensing data sets for investigation variability of hydro-physical fields caused by influence of natural and anthropogenic factors,

case of the eastern Gulf of Finland

Leontina Sukhacheva

P113. Appearance of sea surface signatures and hydrodynamic features in the South-East Baltic Sea on the MODIS and SAR images

Evgenia Gurova, Andrey Ivanov

P114. Implementation of the High Resolution Imagery for Monitoring of Illegal Dumping in St. Petersburg, Russia

Yury V. Ryabov

P115. A comparison of ASCAT wind measurements and the HIRLAM model over the Baltic Sea  
Jekaterina Služenikina, Aarne Männik

## **9. Modeling as support for management**

P116. Reanalyzing physical and biogeochemical variables on long time scales using a 3D ocean circulation model of the Baltic Sea  
Ye Liu, Lars Axell, H. E. M. Meier

P117. Development of spatially heterogeneous simulation mathematical model – device for the study of hydrological, hydrochemical, and biological processes in the water area of the Neva Bay, Gulf of Finland  
Konstantin A. Podgornyj

P118. Dissolved organic carbon in the southern Baltic Sea - numerical simulations and experimental data.  
Anna Maciejewska, Lidia Dzierzbicka-Glowacka, Karol Kulinski, Janusz Pempkowiak,

P119. Modelled long-term evolution of the hypoxic area in the Baltic Proper  
Erik Gustafsson

P120. Impact of sea ice deformations on the shipping in the Gulf of Finland  
Ove Pärn, Juri Elken, Jari Haapala

P121. Nutrient load reductions in future climate of the Baltic Sea - assessment of uncertainties  
Helen Andersson, Christian Dieterich, Anders Hoglund, Robinson Hordoir, Semjon Schimanke, Markus Meier, Kari Eilola, Ivan Kuznetsov, Thomas Neumann, Oleg Savchuk, Bo Gustafsson

## **9/1. Assessing the status and trends of the Baltic Sea ecosystem**

P122. Bioassessment for the shallow Baltic Sea bays based on macrovegetation

Joakim P. Hansen, Lena Kautsky,

P123. Algal community in the eastern part of the Gulf of Finland at the last decade.

Yulia I. Gubelit, Vera N. Nikulina

P124. A bioelectronic system for the monitoring of cardiac activity in mussels and crabs and its application in environmental assessments

Sergey V. Kholodkevich, Tatiana Kuznetsova, Kari Lehtonen, Jacob Strand, Anton Kurakin, Nikolay Kamardin, Eugeny Kornienko

P125. Toxic effect of summer phytoplankton from the Gulf of Riga on bacteria *Vibrio fischeri* and other organisms

Purvina Santa, Barda Ieva, Seile Elina, Balode Maija, Purina Ingrida

P126. Testing of different national water quality assessment methods based on indicators of Submerged Aquatic Vegetation used in the Baltic Sea region in Estonian coastal area.

Kaire Torn, Georg Martin

P127. Hematological analyses of flounder and herring from the Baltic Sea

Ruta Medne, Maija Balode

P128. Seasonal activity of biomarkers in bivalve *Macoma balthica* from the Gulf of Riga (Baltic Sea)

Barda Ieva, Purina Ingrida, Rimsa Elina, Balode Maija

P129. Eutrophication monitoring station – WAB Project

Ludwik Lubecki, Katarzyna Bucholc,

Przemyslaw Makuch, Malgorzata Szymczak-Zyla,  
Grazyna Kowalewska

## **10. Managing the scientific knowledge on the Baltic Sea environment**

P130. The South Baltic WebLab – a joint initiative to communicate marine science to young pupils

Dalia Baziuke, Barbara Hentzsch, Marija Katazyte, Alke Martens, Joanna Potrykus, Arturas Razinkovas-Baziukas, Pia Romare, Per Roos, Sven Hille, Artur Skowronek, Regina Terlecka, Martina Weicht, Lovisa Zillen

P131. Visualization of hydrological, physical and biogeochemical modelling of the Baltic Sea using a GeoDome

Helén C. Andersson, Patrik Wallman, Joel Dahna, Chantal Donnelly, Kari Eilola, H. E. Markus Meier

P132. Comparing Russian and Swedish chemical management in the frame of EU Marine Strategy Framework Directives

Oksana Udovyyk, Michael Gilek, Mikael Karlsson

P133. Polish-Russian cross-border cooperation concerning integrated management of the trans-border area of the Vistula Lagoon

Kamińska M., Krzysiński W., N.V. Shchagina, B.V. Chubarenko, S. Alexanderov